[Volume 3]

Thomas Hamilton

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Vol. 2

Stimulants. — 29

We now commence Gent: with the important class of Incitantia or Stimulantia. I am indifferent wh. term you use, they are both equally applicable The term Incitantia was abused by Linnaeus in making too extensive an application of it, but Darwin who took the term from Linnaeus, has not made this abuse of it. I begin with the Volatile Alkali I now place it at the head of Incitantia.

Volatile Alkali or Ammonia.

This is a most important medicine; in fact it is impossible to manage many of the diseases wh. occur in a wide range of practice without it. I conceive it to be one of the 4 or 5 most important Articles in the Mat: Med: I shall make no inquiry into its natural History its Chymical History I presume you are all acquainted with. It is produced for a number of Vegetables, & by distillation from the Fungous plants for Mushroom

Horse radish &c It is considered as an Anti scor-
butic. It is not my intention to lay before you an
acct of all the diseases in wh it has been said
to be useful. I shall just give a few scattered
hints tho however will be somewhat methodically
arranged. The stimulating powers of the Volatile
Alkali are very manifest & evidently shew the pro-
priety of placing it under the head of Incitantia. It
is certainly a far more powerful Stimulant than
Opium. I shall now speak of the

Diseases in wh it is employed. I shall
mention those only in wh it has been particularly
advantageous

From the affinity of the properties of the Vola-
tile Alkali to many articles wh are adapted to
Intermittent fevers, many Physicians, (& partic-
ularly the European) have been induced to em-
ploy it before the time of the expected Paroxysm.
& that with the effect of moderating the chills &
succeeding fever. It has also been employed in
the hot stage with a view of producing Diaphore-

sis. In this case it was combined with Opium. One writer ascribes more efficacy to it than to the Peruv: Bark. There are many cases in which combined with the Bark, or when alone, it is more efficacious than that valuable article. I think Ammonia is adapted to those cases of Intermit= tents where there is a tendency to Typhus, & where the Bark in Conjunction with Cascarilla, is in= dicated. These cases then of fever, whether Remit= ting or more Continued, which have a Tendency to Typhus call for the use of our medicine. Hux= ham & Pringle used it in the Jail & Camp Fevers.

Quarin used the Volatile Alkali with success in Putrid Petechial fevers where the Pulse was tremulous & Intermitting, but soft. He combi= ned it with Castor. Altho it is a most impor= tant medicine in the management of such Fe= vers, yet it has often proved injurious. It has been administered too indiscriminately in all Stages of Fevers. It is not adapted to the first sta= ge of Typhus when the symptoms are Febile

& inflammatory action exists in the brain. In the
second & third stages where there is a prostration of
strength, subsultus Tendinum, the pulse not tense
but feeble, & a dry skin, in these cases the Volatile
Alkali is our best remedy. It has been much used
in the 3° Stage. Writers have not been sufficiently
precise in their directions as to the time of its exhi-
bition in Intermitting & continued fevers. I give
it in the intermission or Apyrexia only, for even
in the 3° Stage we find twice in 24 hours the pe-
riods of exacerbation occurring, at w^h time we sh^d
be sparing in Stimulating medicines. It is then
proper to exhibit it only during the intermissions
or Sub Apyrexia

Genuine Pneumonic Inflamm-
mat^n Here the Vol: Alk: is not adapted,
but there is a species of it in w^h it is one of our best
medicines. There are Stages of common Pneumo-
nia in w^h I have found the Vol: Alk: to be the
best medicine w^h we can employ. The Stage I
allude to is that of w^h I gave you an acc^t when

treating of Serpentaria. It is that Pleurisy in w^h Typhoid Symptoms early discover themselves & w^h occur in Marshy countries, shewing a tendency to Typhus, & accompanied with Petichial Carbuncles It is much increased by bleeding. The pulse is feeble & irregular, there is prostration of strength, and absolutus Jejunum after bleeding. Blisters, wine whey, opium & volatile alkali form the proper mode of treatment; the last is beneficial, not only by its stimulating but by its expectorant qualities. Pringle gave it in Pleurisy & Peripneumony combining some expectorant oily medicine with it.

In that obstinate permanent Hoarseness w^h succeeds the Measles, the Volatile Alkali is one of our best remedies. I have used with the most marked advantage a watery solution of the Carbonate of ammonia combined with G: Arab: & Sugar.

Pertussis. The Literary Journal of 1733 mentions several instances of its efficacy in Pertussis. I have never used it in this Complaint.

Dysentery. Martine speaks in high terms of the efficacy of Vol: Alk: in Dysentery, he says it mitigates the Gripes amends the appearance of the blood discharged, & produces a salutary sweat

Rheumatism. It has been used in Britain it is said with much advantage. It enters into the composition of the Vol: Tinct: Gum Guiac: so much celebrated in Rheumatism, & this tinct: owes much of its efficacy to the Vol: Alk: I have used the Vol: Alk: with advantage, & in some cases it is more beneficial than any other medicine. It is adapted to all chronic cases & where the evacuent plan has been used. I have given the watery solution of Carbonate of Ammonia to the extent of 30 or 40 grs in 24 hours. —

Hemiplegia. I have employed it here & I think with advantage. From the great affinity between it & Chronic Rheumatism I think it must be useful. — It is adapted to

Palsy in wh I think it has been too much

neglected, tho' it is not, as has been said, an infallible remedy. —

Irregular Gout. Where stimulating medicines are to be used Vol: Alkali may be employed with great advantage. Dr Coxe says he has employed it with more advantage than any other medicine, Colkin the Form of Vol: Tinct: of Gum Guiacum & the watery Solution

Dropsy. It has been used in some cases. I cured one case of Anasarca complicated with Hydrothorax with it. —

Bites of the Viper & Rattle Snake.

In these cases the Vol: Alk: has been used both in Europe & India. It has been used internally & externally. Sage calls it a true Specific against the bites of the Viper & all venomous Serpents; and even Bees, wasps, & pismires. There was some experiments published in India that appear to render it a Specific. In our own Country. Dr Ramsay of S. Carolina published a paper on its efficacy in bites of the Rattle Snake, but these circum-

stances did not come under his own notice, & to me, they are by no means satisfactory. — The Abbe Fontana says, that in his hands, it not only proved of no advantage, but evidently accelera-ted the effects of the poison. He experimented on Sparrows, & tells us it was altogether useless either when applied or swallowed. It produced vio-lent inflammatory symptoms, & he supposes these were augmented by the Vol: Alkali. —

After convulsions & bloody urine have come on, bites often terminate favourably. Thus a rab-bit wh I caused to be bitten by a Rattle Snake, was ill for 3 days, & was siezed with Convulsions & a discharge of bloody urine. He afterwards com-pletely recovered without the assistance of any re-medy, & had the Vol: Alk: been here given, his recovery would certainly have been ascribed to that. The power wh Nature has, or if you please the tendency of the Constitution, to get the bet-ter of bites from venomous Animals, is a fact wh has made a strong impression on my mind.

Darwin & Sage both assert that the Vol: Alk: is efficacious in such Cases. One of Tifots cases seems to prove its efficacy. It has been used externally & internally in Ulcerous affections & even Cancers I have never employed it for this purpose: —

External Use In 1780 Martini published an acct of 4 Cases of Cancer wch were cured by it. It was internally given & externally applied by the Professor of Leyden in Cancerous Ulcers. Houstan used the Spt Sal Ammoniac in the dose of 15 Drops 3 times a day in a Scrophulous Cancer of 3 Months standing wch he cured by it. —

Hitherto I have spoken generally of it without mentioning the preparations. — It is often given in a pill or Bolus with some Conserve, & in Typhus & such fevers, this solid form or Bolus is the best way of exhibiting it, its effects being more permanent. My favourite method is to rub down the Concrete Volatile Alkali with a portion of G: Arab: in the follow[g] Manner — Carbonate of Ammonia or Concrete Vol: Alk — — ℥i

Powder of Gum Arabic — — ℥ij ℥iij

White Sugar ——— ℥j
Water ——— ℥viij or ℥x —

In Gum Arabic clothes the Acrimony of the Sol: Alk: & you are able to exhibit it in larger doses. Cullen had no Idea of such a method of preparing it — If combined with Gum Arab: or White Sugar 48 grs may be given without producing any heat in the Fauces. Cullen places it among the Antispasmodics — he says the mischief arising from its Heating powers greatly overbalances the advantages derived from its Expectorant Qualities — He says also that musk is the most powerful Antispasmodic we are acquainted with, & a most stimulating Article. —

Opium

* Opium was termed Meconium by Dioscorides

^ & Universal

Opium.—

Of the great class of Stimulants, I shall make several subdivisions— Thus I shall treat of Narcotics, Diuretics & some other of the General Classes of Cullen as sections of the ~~great~~ class of Stimulants — I proceed now to speak of Narcotics

Narcotics I shall likewise divide into 3 sections viz Papavaraceo— Lucido or Salaneo & Umbellato or Umbelifro— The only Article we comes under the head of Papavaraceo is Opium†— This is a powerful Stimulant— But I by no means think it the most powerful Stimulant of the Vegetable Kingdom. It is the produce of a particular Species of Poppy the Papaver Somniferum of Linnæus— he termed it thus because it produces Sleep— It is obtained by making incisions into the head of the Poppy, by w^h means that juice is obtained, w^h inspissated, forms our Opium. When these incisions are made with glass, the Opium is of a clearer colour. The incis

ion is made with a 3 edged knife. Opium is often adulterated with an extract, obtained by boiling the whole plant, or by being mixed in the the Capsule of the Poppy & other extraneous matter. It is generally of a very dark brown colour, but this is said to be owing in a great measure to the incisions being made with a Knife, a part of the Iron being thus combined with the juice - Perhaps we do not often receive it in a pure state - There is reason to think it is often adulterated - Mr Carr, who resided at Batoon in the East Indies for some time tells us that the Seeds are sown in Quadrangular Areas, the plants being 6 or 8 inches distant from each other. That they are supplied with water until they get to the height of 6 or 8 inches when a compost of dung is put around them. At sun set 2 incisions are made into the Head of the poppy, one below & the other above so as not to penetrate the seeds. The juice or exudes is collected in the morning in clean vessels & exposed to the sun until it in-

inspissater. This is the purest opium. There are
three species of Poppy beside the Papaver Somni-
ferum; every Species abounds with Lactescent juice
but it exists in greater abundance in the last. It
has a strong, & to most people, a disagreeable smell,
but to me, it is the most pleasant of all odours.
The purest Opium has a more bitter & pungent
taste than the Common. It leaves a sense of taste in
the mouth, fauces, & tongue. It is said to be adul-
terated sometimes with the Lactuca, & Mr Carr
says with Cow dung. From some experiments of Dr
Crump, it appears to be less impure than is gener-
ally supposed. He says out of 12 parts of the pure
unadulterated Opium. he procured from 2 to 2½
of feculent Matter; & out of 12 parts of the common
Opium of the Shops, he got only from 3 to 3½ of this
feculent Matter. The Mahometans use it in-
stead of Wine as their religion prohibits. The
Opium imported into this Country comes from
Persia & Egypt; but as good Opium has been made
in this Country as we can get from Asia. It is

made on the North River & in Rhode Island. —
Before Opium was used as a Medicine the Poppy
was cultivated on acct of the Oil wh may be ex=
tracted from its Seeds. This oil was used as com=
monly as Olive Oil is now amongst us. The
Seeds do not appear to possess any of the proper=
ties of Opium. —

I proceed in the next place to give an acct
of its effects upon the living System in a heal=
thy state — & first

Externally Applied & in a liquid form.
If the application be to the Eye, Urethra, or
other sensible parts, it first produces pain and
some degree of heat, & inflammation. Afterwards
it diminishes the sensibility of the Parts. Pow=
dered Opium introduced into the Nostrils acts
very much like Snuff inducing titilation, sneez=
ing &c These Stimulating effects do not pre=
clude its use in injections in Gonorrhoea, (or
as a Collyrium) for I have used it without
ever experiencing any inconvenience. It some=
times gives considerable uneasiness. But by

no means sufficient to exclude its use. In Gon-
orrhœa I have used it combined with Plum-
bum Acetum. Dr Lind tells us that he relieved
the Spasms of Tetanus by applying Opium & Cam-
phor in the form of a Poultice to the Soles of the
feet & always returned when the Poultice was
taken off. Dr Harden says he has seen the
most beneficial effects from externally applying
Opium in the form of Liniment to the Stomach in
relieving puking. Dr Cullen says that it not
only operates upon the part to which it is applied, but
upon the other parts to which it is connected thro'
the medium of the Nerves. Dr Jackson & others
are of opinion, that Opium has no effect when
externally applied to a part where the skin is en-
tire. This however does not appear to be the case.
An Anodyne plaister applied to the Temples often
relieves the Toothache. Laud: applied over the
Abdomen, has allayed Vomiting, removed Spasm
of the Stomach, bowels &c. In this way it sometimes
induces Costiveness. Opium is generally best ap

plied in a liquid form. When externally applied, in what way does it act? Is it upon the Nerves, or by being absorbed & taken into the Circulation? I am of opinion that it acts on the surface to wch it is applied & thro' the medium of that, on the whole System. Is it taken up by absorption & conveyed into the system of the Bloodvessels? I think not. For thó absorption does certainly obtain in Fish, Serpents, Toads &c. there is no certainty that this process ever goes on in man. A rattle Snake in my possession lived 21 Months without eating or drinking. I always observed it appeared fullest when there was much moisture in the air. In fish no doubt, the Lymphatics terminate extra Cuticula. There can I say be no doubt but that these Animals are capable of receiving into their systems substances taken up by absorption. But whether in this way they could be conveyed into the living Human body is very doubtful. — I shall now consider the effects of Opium when taken internally, on the Vital Natural, & Animal functions ——

Internal Use. Opium when taken internally in a moderate quantity into the Stomach increases the action of the Heart & Arteries, also the heat of the Body, increases the force & frequency of the Pulse - Secondarily, it induces langour & debility - Respiration is little excited unless large doses are given; in this case, all the appearances of Apoplexy are produced: When taken in large doses, it produces all the peculiarities of Fever, increases the pulse & impels the Blood to the head Dr Crumps experiments are very conclusive on this point, they were made with care, & in a room of moderate temperature, & every thing avoided as might prevent their being correct. The Natural Standard of Dr Crumps pulse was 70 in a minute - he breakfasted at 9 O'Clock & took 1 ℈ of Opium at 12 in 5 minutes his pulse was increased to 76, it increased the fulness also - He gave it to a young man remarkably robust & strong, the natural Standard of whose pulse was 44 - it continued Natural 20 minutes

at 25 minutes it increased to 50 at 30 & 52 at 35 & 54 at wch was the highest it went - it then decreased & at the end of 45 minutes beat only 48. Jun 55 to 60 only 46 & at the end of 90 minutes was down to 44 its natural frequency. When opium produces sickness at stomach, I have generally found relief from a spoonful or 2 of vinegar. Dr Haller has given us a very striking testimony of the stimulating effects of Opium - Upon making use of a Clyster wch contained a large portion of Laud; he always found it to increase the pulse, afterwards a pleasing languor. - When therefore you find a contrary opinion urged against the operation of this medicine, you may infer that they have neglected the primary effects. & have only attended to the symptoms after the medicine ceased to operate, & I think it is on this acct we read so much on the sedative effects of medicines. Dr Bard in his dissertation, has attempted to prove the direct sedative effects of Opium, but his experiments are

by no means conclusive, as he told us nothing of its effects during the first half hour. In my own person I have perceived the stimulating effects of Opium in less than 6 minutes after taking it. The pulse shd be attended to for the moment it is taken into the Stomach. Buchan affirms that it not only increases the pulse in frequency, but it likewise increases the diameter of the Arteries. Opium also increases the heat of the System. I was myself a few years ago in the habit of taking it in large quantities, & it always produced a flushing of face & a burning pricking sensation in the palms of my hands. The Tinctura Opii vel is so frequently experienced is also an evidence of its increasing the heat of the body - And upon examination of the bodies of those who have died from taking Opium we find the Blood vessels of the Brain turgid & distended with Blood. - I shall say a few words of its effects on

The Natural Functions. In large doses it generally impairs the appetite produces vomiting & Constipation of the bowels. To a person un-

accustomed to it If will sometimes wonderfully derange the Stomach, impairing digestion & its effects in suppressing the appetite are so well known that the people of the East Indies once, during a famine wch prevailed there, purchased it at an immence price for this purpose Its effects in producing vomiting are generally known. But it has also the Contrary effect of producing good digestion when used with caution; but those who use it with this view are ultimately sufferers. By lessening the intestinal discharges it is often a source of much distress. But in some instances it acts as a Laxative it is used with this view in Colica Pictonum in Vienna, & has also a remarkable effect in producing a powerful discharge of flatus. It acts as a Diuretic, but I am far from thinking that its operation in this way is constant, but I think it evidently increases the effects of Digitalis. It is said to said to increase the discharge of Saliva; it has been known to Salivate, but I have never

observed it. Halo increases the perspiration wh
is generally accompanied with or preceded by an
Itching or pricking of the Skin wh sometimes
continues for 2 or 3 days — It may generally be
prevented or relieved by drinking a bowl of warm
tea. Boils & Cutaneous eruptions are sometimes in-
duced by Opium; it is also said to augment the
secretion of Bile. — The Larva of some insects
feed upon Opium. I have fed them upon it alone
for some time & they were nourished very well.
This goes some way to prove it a Nutrient — I
think it proves it not a poison. —

On the Animal Functions it

produces the follow[g] effects. — In small doses it gener-
ally produces a pleasing hilarity of the mind, an
increased flow of Spirits. In large doses it produ-
ces Intoxication & delirium — generally the de-
lirium fm Opium is pleasant — Here the Analogy
between Opium & Spt is very great — After some
time this hilarity is succeeded by effects of a very
opposite nature, disposition to sleep, tremors Weir-

tigo. Head ache, Tenitus Aurium & Convulsions
If large doses are given Dr Wilson says. that gen-
erally, not always, the convulsions resemble those
of Tetanus. I have known it to have a remarka-
ble effect upon the minds of Children under 6
years of age, producing a pleasing Intoxication.
The Turks take Opium before a battle to inspire
them with Courage — They resort to opium, as ma-
ny in this Country do to Ard^t Spt^s to drive
away thought & care. There is a very great Ana-
logy between the effects of Opium. & wine & Ard^t
Spt^s Wine increases the force & frequency of the
Pulse, & increases the heat of the body — Elevation
of Spirits, Intoxication, Delirium &c. The effects
of Opium are nearly the same. I come now to
say something of the enormous doses of Opium
that have been taken. — The Soldiers of Hin-
dostan smoke it with their Tobacco, & it is not
an uncommon thing for them to be intoxica-
ted by its use especially just before going to Bat-
tle, & when they intend perpetrating any mali-
cious act. Garcon informs us of a man who

took 1 Oz in 24 hours - & D^r - of this City informed me that a Servant girl of his used 16 or 17 Z in a day to relieve the pain of a Cancer in the Uterus. Opium & Wine when long continued destroys the Appetite. I am not able to draw a Comparison between Opium & Wine in producing Constipation of the Bowels - They have both nearly the same effect upon Maniacs. I are in general injurious. I am however of Opinion that in most maniacal Cases where opium does good wine wd - also be found useful. The Arguments in favour of Opium as an incitant are as follows -
It taste is pungent & heating, when poured into the eye in a liquid form, it produces heat, pain, & increases the secretion of tears. When injected into the heart of Animals after being taken out of the Body & ceased to pulsate, it has produced action - when taken internally it increases the fulness & frequency of the Pulse & the heat of the whole System - It increases the secretion by the Skin, & Kidnies, excites a disposition to venery, &

gives temporary pleasure to the mind & body. —
These effects entitle it to the appellation of an In-
citant. It is not only in Health that these effects
are produced, but likewise in a morbid action
of the System — not only Opium, but wine, Cam-
phor, & other Stimulants — But not are so suc-
cessful as Opium. — When given before an expec-
ted paroxysm in the Intermittent fever, the fit
is often suspended. But it sometimes fails, Al-
tho the Cinchona is much more feeble in its oper-
ations, it is much more effectual in this res-
pect. In the low state of Typhus Fever, attended
with Subsultus Tendinum, & in Confluent Small
Pox when the System is debilitated, opium is in-
dispensible. Dr Sydenham used it with a view
to suppress & raise the powers of Nature Dr Hal-
ler says there is no difference between the action
of Opium & Alcohol. Dr Darwin has placed it
at the head of his Incitantia, thinking it to be
the most powerful Stimulant. Prosper Alpinus
has remarked that the Turks who chewed Opium
always became languid & torpid for the want of

of it. & could only remedy it by large draughts of wine with pepper. — When you wish to wean persons fm the use of Ard^t Spt^s, opium supplies their Stimuli. These observations shew the Analogy between the effects Opium. & Wine & Spirits Opium is one of the best medicines in cases of Mania induced by intemperance in drinking. It is also one of the most valuable Medicines that we use in Atonic Gout — Dr Cullen tells us he gave 10 gr^s twice a day — He says that genuine inflammatory Gout in the extremities, is always preceded by an affection of the Stomach, But this is by no means the Case at all times — In genuine inflammatory affections, particularly at the Commencement —, opium like other Stimulants is injurious — If it were a Sedative it w^d do as much good as V.S. in such cases. Dr Young of Edinburgh says that it is injurious in all cases where V.S. is necessary to cure the disease — These observations are true with a few exceptions — as Nephritis. where the pain

is great, & it is necessary to bleed Opium seldom does harm even before bleeding in Pneumonia. but always in such quantities as to produce its sedative effects. Another case is Acute Rheumatism. I have always made it a practice to give Opium every night at bed time, but with a view to its Diaphoritic effects, & always in the form of Dovers Powder. Opium consists of 3 principles, a Gum, a Resin & a quantity of Feculent matter. The Gummy part is soluble in water, the Resinous in Alcohol. the feculent is not completely soluble in either. Opium is said to contain a peculiar principle - "The Principium Narcoticum" on wh most of its virtues are said to depend. In pains fm excess of motion I am of opinion that opium is very pernicious But in pains fm defect of motion wh are generally attended with Coldness of the extremities Fr Opium relieves the pain sooner than any other medicine we can employ. —

The most plausible Argument against Opium as an Incitant, is derived fm its relieving pain. But this when attended to with due care will have but little weight; it will seem then that whatever excites warmth in a part shd give relief; Those called Nervous pains wh are often succeeded by Convulsions - in such cases Opium must be exhibited with Caution & in small doses. It much less will be found effecacious than after it has once failed -

Does Opium never give relief in inflammatory pains? If it does in such cases, does it not follow that it acts as a Sedative, & not as a cordial or Incitant? I answer it does. But no relief, or sleep is attained until some time after the Opium has been taken - it first stimulates the System. It produces all the effects previously enumerated. & afterwards torpor is induced, like drunkenness fm Aplt - & during this Torpor whether it proceeds fm Opium or other Stimuli, the System is much less irritable, or sensible of its

misery. When it is given to relieve pain ac=
companied with inflammat^n its first effect
is to increase it, & sometimes to such a degree as
to produce Mortification or death of the infla=
med part. Upon the whole, perhaps the best me=
thod of relieving this pain & inflammat^n is by
blistering, Purging & low diet, as it is attended with
an increase of heat of the whole system & other symp=
toms of increased morbid action. But on the
other hand, nervous pain is attended with a weak
pulse, cold extremities & other Symptoms of de=
bility, & in those cases, opium first increases the
excitem^t diminishes pain, & removes wake=
fulness; if the dose is increased, indirect debility
is the Consequence. The Operation of Opium
is also more sudden & diffusible than other Stim=
uli, it also ceases more suddenly, & leaves the sys=
tem abruptly in a State of Torpor. But on the
Contrary other Stimuli cease to act more grad=
ually, & in this case the system is not so sensible
of the torpor as when induced suddenly. — If —

If there are other more stimulating medicines than Opium, why do not the same effects be produced by them? I say there are, but all stimuli are not anodyne, a certain degree of diffusibility is requisite. Mr Opium possesses over all other medicines. The effects of stimuli are not always in proportion to their quantity or power, but depend much the effects of those acting on the system immediately before its administration. This is well illustrated by remaining for some time in a dark room, where the stimuli of the light is but feeble, afterwards going into a room only moderately illuminated, or not more than the eye has been ordinarily accustomed to, the light will be almost insupportable - whereas if the eye had been previously exposed to the rays reflected from a mirror in the Sun, it would have been no way affected. From these remarks the following Conclusions may be deduced concerning the operation of Opium. —

1st It is unquestionably a Stimulus. —

2ᵈ It stimulates powerfully, & rapidly diffuses itself thro' the System. —

3ᵈ The Strength of the System is easily and readily exhausted by it. —

4ᵗʰ As its principal effect is to increase the strength of the System, the consequence is, the removal of pain & debility. —

5ᵗʰ As it stimulates the system rapidly, it soon exhausts & leaves it in a state of Torpor or insensibility; the effect of other Stimuli will be much less than if they had been given before it. —

The greatest objection to Opium, is, its leaving the system in such a state of Torpor. —

We come in the next place to speak of the diseases in wᶜʰ opium has been given. —

Intermitting Fever. —

The use of Opium in this Fever, is far from being a modern practice. Galen found the preparations of it useful in Intermittents. Actius this Contemporaries gave it with success immediately before an expected paroxysm. M. Berrietta gen-

ually gave a dose about an hour before the
expected fit. especially if the patient complained
much of cold & tremors he observed it was not
proper if not given about this time before the fe-
ver. Dr Lind says that if given after the forma-
tion of the hot fit, it moderates all the Symptoms
he observed it to have the following effects - 1st
to shorten the Paroxysms - 2d to give sensible re-
lief to the Head - & 3d soft & refreshing sleep. Jun
1st the patient awoke bathed in sweat - the al-
ways gave it after the paroxysm began to abate.
Jun2 remark however, that altho' the exhibition
of Bark & Opium, during the hot stage of Inter-
mittents may be proper in Hot Climates, it
certainly is improper here. Perhaps the practice
of Dr Lind may be followed with advantage
in the more Southern parts of the U States. I
have observed the effects of Opium more par-
ticularly in intermittent fever, than in any
other disease, & have universally found in cases
where it did not abate immediately, that it ne-

ver increased the fit, but that the patient al-
ways received some benefit. It never increa-
sed Delirium, but I shd advise it always to
be delayed until the Fever was over. Opium pre-
pares the System for Cask. I generally give a
dose with about Zij of Tinct: Sacra: thereby
cleansing the bowels, & obviating Costiveness. The
experiments made by Lind are certainly inge-
nious, but I am unwilling to follow his prac-
tice. I have observed in Intermittents accompa-
nied with a pain in the head, where Opium
was given, before or after the paroxysm was over
that it always increased it. Upon the whole
I think it rather dangerous when there is a
pain in the head, for determining the blood
to that part. Dr Stork of Vienna says that
Opium giveng during the hot stage of Intermit-
tents, increases the delirium if any attends, makes
the pains in the head more severe & when we
Consider that in many intermittents, there is
a great determination of blood to the head, &

disposition to Apoplexy. & also that opium when it kills, does so by inducing Apoplexy - Also the stimulating nature of Opium. the impropriety of exhibiting it during the hot stage must be evident. Dr Morton gave it in a great number of instances, & says there were only 2 cases that were fred frm fever after sleep - in one case there was an entire loss of appetite, & in every one great tremor & a prolonging of the Paroxysm. but I am sat frm assenting that it cannot be given with advantage as recommended by Lind. the same observations will apply to opium that I made on the Bark. - Dr - found Anodyne draughts efficacious about the commencemt of the hot fit in combination with Sal: Ammon: The Testimony of many respectable physicians is in favour of the efficacy of Opium exhibited about an hour before the accession of the Cold fit that has in many instances prevented the return of the Paroxysm. Dovers powder is one of the best & most certain of all Sudorifics given a

short time before the expected accession of the
Cold fit - it has prevented it, or been otherwise
useful. Dr Crump says it is most efficacious
given just before the fit, in a cup of warm Coffee,
Its tendency to affect the head, & its narcotic ef-
fects are diminished, while its stimulating are
not; it also assists perspiration. Coffee possesses great
power in diminishing the effects of Opium. No
more sleep is induced by 60 drops of Laud: in a
cup of Coffee than by 25 or 30 without it. M^r ---
says that coffee has an Anti-narcotic effect when
burnt - he found what quantity of Opium w^d kill
a chick when given with unburnt coffee - he af-
terwards gave the same quantity in combination
with burnt coffee & found that it only made him
stagger. Sir Jn^o Pringle says that Coffee assists
assists the operation of Opium in relieving Asthma.
Violent intermittents that are little disposed to
terminate in sweat might be shortened by giv-
ing Opium in the form of Dovers Powder. Cof-
fee with opium prevents the sickness of stomach
Cangour &c^a often succeed the stimulating ef-

fects of Opium. It has been found useful combined with bark, it makes the bark sit better on the Stomach & prevents it Qualities running off by the Bowels. Dr Cullen says he gave it in this way before the expected fit. It says it will enable a less dose of the bark to prevent a return of the fever. I am of opinion that the combination of bark with Opium, Camphor, Serpentaria &c is especially useful in those Intermittents which have a strong tendency to Typhus.

I have commenced with Intermittent fever, because it afforded an opportunity of shewing the Tonic effects of Opium upon the System. The use of Opium in this decade is of Ancient date. Bevilla & others agree that it is proper, but they cannot agree about the time of giving it M^r B says it is improper after the commencement of the Paroxysm but M^r Lind is of a Contrary opinion — I have had no experience of it in the hot stage, neither do I deem it safe, tho' I think it may be exhibited with more safety during the Paroxysm in hot than in Cold Climates. — I proceed to say something of its use in Fevers of a more Continued Form

G B

Typhus. It has been used with good effects in Typhus fever. I am not of Opinion with Dr Cullen that Typhus & Synochus fevers are always produced by different causes. Dr Currie has proved that Marsh Miasmata will produce both Synochus & Typhus, & Cullen on the Contrary asserts that Synochus is produced by Marsh & Typhus by Human Miasmata. I am of opinion that many Typhus fevers are in the beginning of high excitement or excessive action, contrary to the opinion of Professor Cullen who holds that they are all fevers of too feeble action. From the beginning & in the commencement of this disease, the pulse is sometimes full & strong as in the commencement of Mild fevers. I appeal this for much experience in this disease. In all cases of Typhus attended with full & strong pulse the febrile Symptoms continue longer than in Y. Fever. In this stage of Typhus, Opium cannot be given but with injury to the Patient. Dr Cullen says that Typhus is sometimes greatly disposed to inflammation, the duration of this inflammatory diathesis is very various. As all fevers of a con-

continued kind are I suppose the effects of Stimulants. the stronger the stimulus, the shorter & more violent this inflammatory state of fever. after the inflammatory symptoms of this fever are removed either by nature or by Ev. Purging & an Antiphlogistic Regimen, various symptoms occur wh. may render the use of Opium necessary. In general cases of Typhus, Wine, Bitters & other Cordials are equal to the relief of the Patient. yet there are symptoms wh. absolutely call for the use of Opium & first — Delirium. There is a Delirium occurring in the first stage of fever while inflammat. still exists in wh. opium must do harm. this is best treated by Ev. Purging & an Antiphlogistic Regimen. But in Delirium of the last stage of low fevers depending upon Debility, all Physicians of any practice have agreed upon giving Cordials, & more with more applause than Opium. Dr Sydenhams practice in Typhus fever accompanied with Considerable

inflammat^n was to Bleed, Purge, & Blister for a certain period (to the 12^th Day) & then to Commence with Opium or some other Stimulus, but I dont imagine this rule sh^d be followed. I never attend to the time but be governed by the pulse, for if delirium appeared on the 3^d day after the attack & the pulse indicated the use of Opium. I w^d not hesitate to exhibit it: I w^d refer you to D^r Gilchrists work on Typhus fever the D^r says that a great contrast may be discovered between 2 patients in Typhus fever, one of them having taken opium & the other not, under exact circumstances in other respects. She observes that in general there is a very remarkable alteration in the pulse; it seemed to keep it within proper bounds, & in conjunction with Camphor, is very efficacious in terminating to the surface of the skin. She commonly used it in the following Formula.

℞ Tinct Opii — gtt^s ij/p

Camphor — gr^s x or xv formed into a bolus w^h sh^d be given at bed time; or this

may be used if preferred

Camph: Julep ——— Zij/s

Vin: Antim: ——— gtt 30 or 60 at a dose, & if the effect desired is not produced in 24 hours, repeat it. Dr Cullen seems to have exhibited it with peculiar success in relieving Maniacal irritations in the advanced Stage of Fever, & particularly in one case in w^h he deemed Typhus. I have found (says Dr Cullen) large doses of Opium repeated every 4 or 6 hours very successful in this State of fever, but they are liable to recur unless prevented by a more frequent exhibition. Opium has often been of service in preventing or removing the want of sleep in the second Stage of Typhus. But in the first stage the Antiphlogistic treatment has been found most successful. In tremors or subsultus Tendinum, various Stimuli have been recommended. In some instances Camphor has been found useful, but I believe no medicine has triumphed so frequently as Opium. Gregory says that wine & large doses

of Opium are the best medicines he ever used.
Opium or L: Laud: may be given with great
advantage in the Form of Glysters & more espe-
cially, says Dr R., after it has ceased to act on
the Stomach. I have witnessed the good effects of
Opium in Typhus so much, that I set as soon
attempt to cure Pleurisy without V.S. as Ty-
phus without Opium. it raises the sinking
pulse, increases the heat of the body, & removes sub-
sultus tendinum. The powerful, the pati-
ent is soon exhausted, & it is not uncommon
to find the Patient at the end of 2 hours ex-
tremely exhausted. This shd be attended to close-
ly & a new dose given, before the effects of the first
cease. I have found it necessary to waken the
patient every 2 or 3 hours & repeat it or it may
be done Sooner, if the Pulse shd indicate it.

The 2d Circumstance wh requires our at-
tention in the exhibition of Opium is its re-
markable effect in producing sweat, some-
times so far as to render it ambiguous, & I
have been obliged to desist from it. but in

the generality of cases it is highly beneficial, & perfectly safe in combination with Ipecac & Vit: Sait: forming dovers powder

Yellow Fever. - In 93 bad effects were discovered frm the use of Opium in the Y. Fever, principally during the 3 or 4 first days - it increased the pain in the head, back, augmented delirium, failed to check vomit[g] increased the distress of the patient by producing costiveness. wh it is necessary to obviate by Cathartics; & frm its frequently inducing pain in the Liver, it is highly probable it stimulated that Viscus. Tho' I dont mean to assert it was not useful; on the Contrary, when it approaches to Typhus, & the pulse was small & weak & the stomach in a State of Irritability I found it useful in stopping vomiting, & in some Cases where hot brandy was unsuccessful - I found it to yield to large doses of Opium with evident relief. **Plague**. The Plague in its commencement is highly inflammatory. Tho' in some sta-

ges I think Opium may be useful

Phlegmasia. The whole of diseases of the local inflammatory kind are comprehended under this head, & the generality of writers have agreed that opium is highly injurious. Inflammations have been divided into 2 kinds Active & Passive, altho they often originate in the same cause. Gastritis is of the acute kind, & is to be cured by the Antiphlogistic treatment. But on the contrary the passive is to be relieved only by the most powerful Stimuli, & in some cases, excessive evacuations by the skin will cure the active, wch are to be procured most easily by stimuli. And in the last stage of active inflammation, they are particularly useful in stimulating the absorbents. Dr Cullen says stimuli is beneficial in the suppurative state of inflammation, in those cases the pain is easily relieved by Opium. Dr Young has laid it down as a rule that opium is never to be prescribed when Vs is necessary. This in general is to be adhered to, but there is some

times a necessity for deviating from it_ As in the case of Gall Stones passing thro' the biliary ducts; or Stone from the Kidney to the Bladder thro the ureters!

In Pneumonia, the treatment is pretty well established by bleeding, or by strictly adhering to the Antiphlogistic plan_ But in the last stage, Opium in large doses has been found useful Dr Hamilton found Opium combined with Calomel to be the best remedies - See Med: Ef= says Vol: 4th_ It is to be used with great caution. & not till after repeated B.f._ This is generally absolutely necessary. In its latter end. it has been found very useful combined with Aleagenous substances! —

In Pneumonia Notha of old people it is most dangerous - It is best relieved by B.f. Blistering. Cupping. & Purging. I myself have seen the most salutary effects from this mode

In Catarrhal Affections, Opium has been used_ But generally in the commencement of such affections, the inflammatory diathesis runs

high - When this is reduced it may be given with advantage in combination with Antimony to allay the irritability wh generally remains for a considerable time. I have frequently employed the follow[g] Mucilaginous Mixture Rx - Tinct Opii camp: ℥i
Vin: Antim: — ℥ij
Gum Arabic — ℥ij
Liquorice — — — ℥ij
Aq: Boiling — — ℥vij or viij
2 teaspoonfuls every 2 hours to an Adult - This mixture may be given with safety; when Opium by itself will be found unsafe. If it [illegible] produce Costiveness - 4 or 5 grs of Ipec: Cac: may be used instead of the Vin Antim: or if it [illegible] not produce sufficient evacuations by the Pores. the quantity of wine [illegible] be increased. In the Influenza wh prevailed last fall, I used the follow[g] Mixture with great advantage
Rx Gum Opii: Flor: Benzoin ā ℥i
Camphor ℈i Spt Rectf Oij — Digest 2 or

3 days - but before giving it I generally found it necessary to use the Lancet, & open the Bowels with a Cathartic

Influenza. Dr Hunt says he did not find Opium beneficial, unless it was to suspend the disease; but in these bleeding, blistering & Purging are indicated & used. I have never seen the good effects of Opium more obvious

In the Asthma of Old People, Opium has often been exhibited with great injury to the Patient; by producing a tightness of the Chest, & by increasing the viscidity of the mucus of the lungs. But it may be given with advantage combined with Ipecac: & Antim[y] ——

In Nephrites, however violent the pain or however high the inflammat[y] symptoms may run - it is undoubtedly requisite to have recourse to Opium. In this complaint a Patient can bear 4 times as much as in health 4 pills, each 10 grs has been given in 24 hours

Rheumatism has been divided into

2 Stages - Acute or Inflammatory, & Chronic or that depending on debility. The former kind is best treated by ℞. Purging. Sudorifics, Blisters & low diet. But by attending this treatment it often terminates in the Chronic form. If it assumes the Intermittent Type, recourse sh^d be had to bark &c - in the Apyrexia. Acute Rheumatism is most safely treated after the violence of the disease is somewhat abated by ℞ &c - If the pain continues, it is to be managed by Sudorifics - The sweating sh^d continue 12, 24, or even 36 hours, but not until the inflammatory symptoms are subdued. As our Sudorifics are generally Stimulants - they will, instead of relieving the pain, have a tendency to increase it. Of all Sudorifics, I know of none so valuable & so successful as Dovers Powder, wh^ch is as follows. -

℞ Ipecac: & Opii ā ℈i
Sulph Potaspo - - - ℈i Rub them well in a mortar, so that the Opium & Ipecac:

may bee equally distributed thro the preparation
10 grs of wh will contain 1/2 of Opium. Dose 3ss
10 to 15 grs every 2 hours until sweating com-
mences. The Sulphate of Potash don't seem to be
any addition to the efficacy of the powder. it only
serves to rub down the particles of Opium. I
have lately laid it aside, & adopted the use of
G: Arabic or loaf sugar wh seems to answer
equally as well. Nitre enhances the value in
the quantity of 6 or 8 grs to a dose. It is impro-
per to adhere to one formula I frequently change
it. In making these powders, be particular in
the goodness of the Ipecac: I have often found
that Ipecac 1/2 grs to 2 or 2 1/2 grs of Opium, is
the best proportion. If the quantity of Ipecac:
be increased, it is very apt to increase Nau-
sea. Dr Cullens mode of exhibiting this pow-
der was in the morning immediately after
sleep, but it is not incompatible with sleep. I
commonly give it in the evening. There is how-
ever some danger of the Patient taking Cold fm

his being uncovered during sleep. to prevent
wch he shd be laid between blankets, or wrap-
ped in flannel; by attending to this we will
seldom regret the use of Dovers Powder. The pow-
der shd be made into a bolus with a little
syrup to prevent squeamishness of the stomach.
The covering shd be no more than what the Pati-
ent has been accustomed to be under. unless
some addition shd be deemed necessary to the
feet & legs. No drink shd be taken for 45 or 50
minutes, or until the Patient begins to sweat,
then some warm drink may be taken frequently
such as sage tea, balm tea, or wine whey. If the
sweating shd not extend to the feet & legs, warm
bricks, bottles of hot water &c shd be applied
to the soles of the feet. When the sweating has
continued as long as necessary the additional
covering shd be laid off gradually, using every
possible precaution to prevent his taking cold.-
His body shd be well dried with warm tow-
els his wet linen changed for warm & dry

dry ones. & if the blankets or flannel be wet. it shd be changed. The patient may come out of bed the next morning & put on his clothes as usual. but he shd remain in his room one day at least. taking extreme care of exposure. It is a good general rule never to attempt sweating in the first stage. it is very apt to be hurtful while the inflammatory symptoms run high; & when an attempt is made without success in Rheumatism. the pain is always increased. The exhibition of Opium is nice & somewhat difficult in the beginning of Rheumatism. the pains are generally increased. just before the Sweats break out, but are speedily relieved afterwards. Dovers powder in my opinion is the best & most certain Sudorific yet discovered. Ipecac and Coffee both, destroys or debilitates the Narcotic effects of Opium. When Opium or any poison has been taken thro' mistake, or by design the best emetic that can be given is Ipecac: Mr Hamilton informed me that Opium greatly assists mercury in the cure of Rheumatism produced by venereal

affections. There is a Species of Acute Rheumatism attended with quick pulse, local pains. great irritation. debility &c. this is very generally cured by Bark &c. Whenever Rheumatism is extremely obstinate & resists the usual methods of cure, it is proper to suspect a venereal taint, & to prescribe D^r Hamilton's medicine. —

Gout. So long as this disease attacks the extremities, it is of but little benefit, but on the contrary, I think it rather injurious; & it may be confined to the feet by flannel & a regular diet D^r Brown says it is produced by indirect debility, & may be relieved by Stimuli. I wish this assertion were true; his arguments are deduced by the paroxysms being brot on by profuse & frequent excess in Venery, or by any means which tend to debilitate the system — But it is often truly Inflammatory in the Commencement. Thompson says it generally precedes Pleurisy, or some other inflammatory disease. There is a Species of gout called in general the Atonic Retrocedent, or more properly

Gout of the Stomach in wh the patient experiences sickness, nausea, flatulency & coldness of the extremities - Here Physicians all agree that the use of Opium is proper - It has done infinite good in large doses - it must be frequently repeated. — Cullen says he has given 10 gr twice a day & I myself have given 460 drops of Laud: in 16 hours. — Opium is more efficacious when combined with some other Stimuli, as Salt, Ether, or Ginger the ginger shd be boiled in Milk Zij may be given in 24 hours & I have taken Zi in 12 hours

Sick Head-ache has long appeared to me in the form of Gout; whatever may be its true origin whether of a distinct kind or not, it often goes off with Diarrhea & Vomiting of the hands & feet; but it is more effectually relieved by large doses of Opium in Coffee than any other Medicine. —

Hemicrania is undoubtedly a true Arthritic affection, & when it occurs periodically, it is to be relieved by bark. In this disease. Opium is often one of the most effectual Remedies when given with

Cark & other Stimulants. –

Exanthemata – Hist of Small Pox. In the first Stage of this disease, & in very many cases thro' its whole course, opium is a dangerous medicine. But in many States of Small pox it is a powerful & efficacious remedy. In the Suppurative & Confluent Stages, of Confluent Small pox &c Bark Opium, Wine & Acids are proper.

The Measles is nowhere better understood & treated than in the U: States. It is usually cured by means of the Lancet, moderately cool or cold air, Blisters &c – Opium shd never be given till the inflammatory diathesis of the system is brot down by means of Ref &c The Cough attending is not relieved by Opium. When you give opium, prescribe the Mucilaginous Mixture before mentioned – diminish the proportion of the Tinct Opii Camph: – Many have thought that the Diarrhoea very frequently attending the Measles shd be suffered to go on, but I am of a contrary opinion – It shd be checked by means

of Opium. I have observed that children who have had the Measles & Diarrhoa in the Spring. have always been very severely handled by the Cholera Infantum in the Summer. —

The Scarlatina is one of those diseases in wh Opium has in some cases been used with advantage. —

Hemorrhages are active & Passive. In the last, Opium is a valuable Remedy & even in many cases of Active Hemorrhages, particularly when they appear to be kept up by irritation.

Hemoptysis is an Active Hemorrhage & the Stimulating medicines are generally improper. But even in this, I have usually found it more or less beneficial. The Common Remedies are V.S. low vegetable diet, Cool air, &c When Opium is necessary prescribe the Mucilaginous Mixture. —

Epistaxis is most commonly active, as appears by its attending fevers, occurring in the beginning of fevers &c But in this Hemorrhage I have used Opium combined with Sugar of Lead with advantage. ———

Childbed Hemorrhages often perhaps depend on Spasmodic Constriction of the Uterus — here Opium is good — The extraction of the Placenta shd never be effected by Force. The immoderate flow of Lochia is checked in many cases by Opium particularly in union with Ipecac: —

℞ Opii from 1/4 to 1/2 gr

Ipecac: fm 1 to 1½ gr every second hour

The medicine is most beneficial when it excites sweat.

Hemorrhoids or Piles — In a great majority of cases, it wd prove injurious, not only by its stimulating quality, but also by inducing costiveness &c But in many cases of Piles, particularly internal, it is useful, in the form of Dovers Powder

In Phthisis Pulmonalis, in some of its stages opium wd be exceedingly hurtful, but it is impossible to manage this disease thro' its whole course without Opium. —

Dysentery in the beginning, very often calls for the Lancet Purges &c — It is generally proper to precede the use of Opium by these, particularly purges. It is one of our best medicines in

this disease. I combine Opium with Ipecac: &
give them in all the Stages of Dysentery
In Diarrhoea, it is an indispensible remedy
In Cholera, after the Primo Vio are cleared
out, Opium shd be given. —
In Tetanus, I can say very little concerning
the use of Opium fm my own experience. 3xx of
Sand: were given by a Physician in the W In-
dies to a person labouring under this disease, &
with the effect of removing it - 1500 grs of solid
Opium were given to a Negro man in this City
in 17 days, with the effect of curing him. Cos-
tiveness is sometimes brot on by the use of Opium -
many facts, however, prove that it does not al-
ways produce this effect. Tetanus is often a
Rheumic disease. & this is more especially the case
when it is brot on by poisons, as of the Rattle
Snake - Many respectable Physicians admit of
the efficacy of Stimulants in this disease. It ap-
pears that it is removed rather by those who ex-
hibit medicines in large doses, than by those who

attempt to cure by small ones Wine, Bark and Opium have all been given with the happiest effects, & they may be employed with equal advantage in this disease

Hydrophobia. - Of the use of Opium in this disease, little can be said to increase our confidence in the Science of Medicine, & the Hydrophobia is seldom, if ever, cured. - Many circumstances tend to show that at first it is a febrile disease, this is further confirmed by our attending to its causes, & the remedies wh have been found to be efficacious. It has been brot on by the bite of the Rattle Snake. The stramonium, musk, Opium &c with the effect of so far restoring the patient as to enable him largely & water; they have also relieved the violent Spasms wh take place. Chickweed has been highly extolled in the removal of Hydrophobia; it was used some years ago in England, & has lately been brot into use in this Country. I think it is entirely inert & that it never cured a genuine case of it. A case fell under my care, in wh 600 grs of this medicine had been

given, commencing immediately after the bite of the Animal, with no effect. I have seen Hysteria counterfeit this disease, cured by Opium. Some have proposed curing this disease by suffering the viper to bite the Patient as a Counter Stimulus.

In Chorea St Viti it frequently calls for the Tonic plan of cure, Bark, Cold air, Exercise — Opium given in large doses seldom fails to give a temporary relief of all the Symptoms, it always retrain after its action is over — Dr Sydenham used V.S. Purg. Opium & bitters alternately, but I suspect he cured more by the bitters than by V.S.

In Epilepsy, Opium has been employed. This disease arises from different causes, or to speak more properly, depend on different Constitutions of the System. It is said to be sometimes the effect of the excessive Hemorrhages of red blood, inducing great debility. If it be brought on by mere debility, why does it not occur much oftener in the last stage of Typhus & other fevers, & in old age? It often depends on a Plethoric state of the System

More cures have been accomplished by the Antiphlogistic plan than any other. A Turgescence of blood in the vessels of the brain also induces it; here opium will do much harm. It has been produced by irritation applied to the nervous System; here opium promises to be a valuable remedy, when given before the fit has often prevented it. In one case of this cause, I gave opium with effect. after the use of 3 gr. a terrible change for the better took place they continuing & the disease was cured. The Aura Epileptica appears like a drop of cold water travelling along from the extremities to the head; or like a worm creeping. It is supposed to depend on irritation. & Opium has often cured it. It is doubtful whether this Symptom does always depend on irritation applied to the Nervous System, as is generally supposed. Epileptic fits occur often during the night than in the day owing to the Horizontal position. —

Palpitations of the Heart will depend on Organic affections of that viscus, opium could have

no good effect. When it is symptomatic, as is often the case, opium will relieve it by removing spasm from the part affected. —

Asthma. Opium sometimes proves efficacious in Asthma, & at others it is injurious. — When Asthma is caused by a turgescence of blood in the lungs. This medicine shd never be used Its proper remedies are Vs of Purging & Vomiting. But when this disease is purely Spasmodic, no remedy is so valuable as Opium. 2 cases of Asthma occurred in this City in Gouty Families that were removed by an affection of the Toes & feet. They were both Females. —

Chincough. Here Opium as well as bark is often injurious, & frequently happens that Vs is proper. it may sometimes be given in very small doses without any bad effects. After the Cough has continued a great length of time, it may be removed by the liberal use of Opium.

Water Brash. This disease is com

in Europe & is said to be endemic in some places. Linnaeus paid great attention to this disease & declares it may be treated with meats & sweet milk. This complaint sometimes continues thro life. Dr Cullen says that it may be relieved by Opium, but that this relief is temporary. I take it to be a symptom of Dyspepsia. In one case I used Opium with evident advantage, & removed the disease by giving the Oil of Amber —

Cholic. If the pulse indicate febrile action in the System & Purging &c are to be used. The vomiting &c occurs frequently in this disease prevents purges &c from acting as well as could be wished

In Hysteric & Cold Colic, opium has been highly recommended in removing violent pain

In Bilious Colic it has been of infinite service, but it should never be given until the bile has been removed from the system. — It is said to be useful in Colica Pictonum — Every Physician acknowledges the usefulness of Opium in Cholera. it frequently rescues the patient from the grave

Hysteria

P6

Hysteria like Epilepsy depends on different causes. when it depends on Plethora, opium is certainly injurious & shd never be used

Mania has sometimes been cured by Opium & Dr C thinks it often mitigates the violence of the Symptoms. Mania sometimes depends on an Organic affection of the brain, here opium can do no good, but there are cases where it may be used with great advantage. It often produces sleep. But by using large quantities to obtain this end, we may do much mischief. In that species of Madness induced by Cold Apthæ, opium is the best of all remedies with wh we are acquainted. —

In Old Ulcerous Affections opium was found of great service in St Bartholomews Hospital. —

Salivation - in stopping excessive inflammation, opium has been found the most certain remedy - Mercury does not enter the Circulation, but acts more directly in Salivation. —

Syphilis. Accident discovered the usefulness of Opium in Syphilis, some years since in one

country. It sh^d be combined with the different preparations of Mercury to prevent them \$^{pe}$ purging as it seldom fails to do. There are 2 preparations of Mercury in particular with w^h it sh^d be combined - Calomel & Corrosive Sublimate. Opium by itself has never cured Syphilis, & when it has been said to cure it, some of the preparations of mercury had been previously used. Opium acts by inducing, as it were, an Anti-Syphilitic action & thereby preventing the Virus fr affecting the System. A woman in this City labouring under a distressing Cancer of the Womb took Zij of Opium & Oij of L: Laud: daily for a Fortnight —

Hyosciamus Niger, or Black Henbane. —

This is a very active article of the Mat: Med: & is entitled to attention. — It is not a Native of America, but I have seen it grow so luxurious that it might be easily mistaken for an indigenous plant. It has a strong resemblance to the

Tobacco. There is another Species called Hyoscia-
mus Albus wch is very much like it - The black
is the most powerful stimulating medicine. Dr
B informs us of a person who took Zij of the bru-
ised seed was siezed with a fit of the Colic but
soon relieved by an Emetic - also of a woman who
ate the root - it produced great heat in the Stomach
& terminated in madness. And himself while
a Student at Edinburgh was once very much af-
fected by it - One evening after making some ex-
periments upon it - I left the vessels containing it,
in my bed room, where I was exposed to the va-
pours in the night - very alarming dreams came
on, & even delirium ensued From these & many
other experiments made by the Dr it must be
obvious that the Henbane is a powerful Stimulus,
& nearly allied to Opium - unless it is that Opium
very generally produces a Constipation of the bow-
els, & Henbane often purges. I say this is gener-
ally the effect of Henbane, tho not universally.
Dr Storke tells us of a Patient in whom it produ

ced costiveness. Henbane is a powerful Diuretic
An examination of bodies killed by it establishes its
stimulating effect. The brain is always found tur-
gid & inflamed, & frequently a serous fluid in the
ventricles. Dr Storke, who was much in the ha-
bit of using it generally gave 1ʃ 2 or 3 times a
day, sometimes increasing it to 8, 10, & 15 grs in a
day. To a patient in Melancholia he gave as
high as 20 grs in a day. The Dr asserts that Hen-
bane is sometimes more powerful in producing
sleep than Opium, & may be given with as
much safety. I agree with some constitutions.
I have had much experience of the salutary ef-
fects of this medicine & am convinced that it
ought to be used oftener than it is. In 2 wo-
men labouring under Amenorrhoea it produced
salivation, & brought on their menses. In some
cases of Consumption, henbane will be found
advantageous. Dr Gidding began with 1ʃ of
the extract 3 times a day. It produced a copious
flow of sweat, placid sleep, & invigorated the mind;
but he found it did not cure one case, however

it alleviated their miseries. Dr Fothergill used it in Mania & says he perfectly cured one patient. he began with 5 grs a day & gradually increased to 30. at the end of 5 weeks the patient was dismissed perfectly cured. He also used it in Puerperal Mania in wh case the disease yielded in a few weeks. Opium, Henbane, & the Stimulants may be used with advantage. & are even necessary in Mania of this kind, accompanied with or depending upon debility. Cullen speaks highly of it as an Anodyne & Soporiferous Medicine. he observes he has frequently used it in persons with whom Opium did not agree. Dr Stork used it in Hemorrhage. I conceive this medicine to be about as good as Opium in Hemorrhage, & that the same rules laid down when treating of the use of Opium in this disease are very applicable here viz: that it must not be used in active Hemorrhage, or while it exists in the system. Hoffman used it in Hooping Cough 2 grs a day to Children.

Chordee Henbane has been found a good

remedy in relieving Chordee, it has proved successful even where Opium has failed. — Vs. Purging ℈ must be used, after ℞ Opium is very good, & as henbane is allied to Opium & has the advantage of purging, it must be preferable to it in this disease. In all cases it sh^d be cautiously given at first 1ʃ 3 times a day, ℞ may be increased to 3ʃ 2 or 3 times a day, in this way gradually increasing, it may be extended to 40 ℈. The same attention sh^d be paid in giving the Hyoscianus as Opium, only that it may be increased more rapidly. When the extract is used, it sh^d be prepared fresh every season, tho' by proper attention it may be preserved for some time. —

Datura Stramonium.

This is a common & general plant in the United States. 'Tis known by various names. Jamestown Weed, Stinking Weed &c. On Staten Island it is called Henbane. It is an Annual plant. There are 2 Species, one known by the name of Datura Stramonium has a white Blossom with a green Stock. The other is called Latula has a red

stock with white flower - The smell is poisonous & Disagreeable - Goats & sheep eat it, & are fond of it, & after the leaves are affected by the frost, cows eat them - Tis probable they only take it as a Condiment, for the same purpose that we use Pepper Mustard, Vinegar &c. The first acct - ever given of any Medical Article of America, was by Mr Beverly of Virginia - He speaks of its Narcotic & poisonous Qualities, & the pleasing effects it produced. The extract & other preparations are said by some writers to be Sedative - This is a gross error. It is employed in substance & extract, & the Indians & some nations who are forbid the use of Spt- take it to produce intoxication - Prosper Alpinus tells us that the Turks substitute it for wine. It produces Tetanus & Hydrophobia - It produces copious sweating, increases the flow of urine, & intestinal evacuations. It is a most powerful & general Stimulant - 6 grs of the Pulv: leaves given by Mr Cooper raised a mans pulse in 100 minutes from 80 to 105. It is said to produce Salivation

Two Soldiers who eate this plant for Lambs plant had Tetanus produced by it. Hydrophobia appears actually to have been produced, at least a Constriction of the Fauces, & rejection of Water.

Diseases in wh it is employed.

Mania & Epilepsy. Stramonium was employed in 1755 first at Vienna by Stoke in Mania. Epilepsy & Melancholia. He gave the inspissated juice. Dr — employed it in Epilepsy & Mania but his success was not so great as those of other writers. Mr Copland says it is superior to Opium, & cured all obstinate affections of the mind. He employed an extract from the seeds. Bergius gives high encomiums on the extract. & he has been highly successful in the Mania of Puerperile women. He says if a Seton be introduced in the neck, the medicine is more efficacious. He used the inspissated juice in form of an extract. D Archer says he has given it with advantage in Epilepsy, the most certain relief was given to those whose fits were regular, & the intervals short; & where it did not cure, it prolonged &

mitigated the violence of the Symptoms. He gave
2 grs of the Pulv: Seeds, made into a pill every 4
hours, until some sensible effect were produced. & this
to be kept up until the time of the fit was past. It
shd be given a few days before, & continued a few days
after the expected fit. During the intervals the patient
shd use low diet & occasional small Bs. The seeds he
observes shd be gathered when they are ripe & before
the Pod. those wch are blackest being the best. In
those in whom the fits are long & irregular, it must
be given constant, for in these cases we cant with
certainty Anticipate the occurrence of the fit. Dr
Archer's Formula was Di of the Seed pulv: & Ss
of flour made into 10 pills — frm the success with wch he
used it, he says that it is as powerful a medicine
in the cure of Epilepsy, as Bark in Intermittent Fe-
ver. My experience has been great in Epilepsy,
Mania & Epileptic Mania — & I do declare it is
very proper in these cases; no risque to the Consti-
tution, & it will often cure when other medicines
have failed. I cant suppose it to be as valua-

ble however as Dr Archer has done. I gave it to a patient in - GG - an Epileptic patient laboring under Satiety to no advantage: it produced a dilatation of the Pupil, shewing much febrile excitem^t in the brain. I gave it to Betsy Mc Connick with evident advantage - A black woman who had Epilepsy for 3 years preceded by Aura Epileptica, was entirely cured by the Datura - Bleeding Purging Low diet are often the only Remedies. Opium often prejudicial, often the best medicine, so it is with Stramonium. In all those cases connected with a Plethoric State of the System, & turgescence of the blood vessels of the brain, Stramon: is improper, not only because it is a Stimulant, but it more readily induces particular affections of the Head. These are properly treated by the Antiphlogistic plan - at least until the phlogistic or inflammatory diatheris is conquered, when it may be found requisite to exhibit Stimulants. Stramonium is one of the most powerful Anodynes, tis closely connected to Opium by natural arrangem^t - & nearly allied in its effects

f.

altho it frequently fails in curing Epilepsy, it is also often effectual in the cure of it. I refer you to the Hospital Books of 99 & 1800 — Mary Hill about 35 years of age had been Maniacal for 3 years, after using the extract for some time, she broke out in boils all over the body, & within weeks was discharged perfectly cured. The History of her case is as follows. On the 23 July 1800 at night she was ordered 2 grs on the 26 3 grs & afterwards 1 gr regularly increasing every night. On the 2d August 12 grs on the 16th 16 grs on the 20th 15 grs 23d 18 grs on the 3d Sept. & a Blister was applied to her head & remained that day. On the 4th Sept. the dose was increased to ℥ss — The largest dose was 35 grs She was discharged cured, I was seen afterwards at the end of a year perfectly free from any Symptom. Another case in which the dose was increased to 31 grs without producing any inconvenience except a dilatation of the pupil of one eye, & a Palsy on the same side which was removed by applying a Blister — The patient was afterwards discharged perfectly cured

Bergius found it of equal efficacy in curing delirium accompanied with perpetual grief. Opium has also been used with advantage in the cure of this disease. Stramonium has been usefully employed as a Diuretic —

Hydrocephalus Internus. A correspondent informed me he cured one case by it. —

Spasmodic Asthma. Haun employed the fumes from the leaves in Asthma with great advantage.

Dropsies. As our article is Diuretic, it is natural to suppose it has been employed in Dropsies & accordingly we hear of its effecting cures which will not yield to any other Remedy. — Dr Baldwin gives one case of Abdominal Dropsy in which he used it with advantage. —

External Use. Dr Chalmers advised bruised seeds boiled in Milk to be applied to the feet in Gout; but it is an Axiom that all applications whether Sedative or Stimulant in the inflammation of Gout are improper. An Ointment made by stewing the leaves with Hogslard, has been much extolled in Burns. It has also been used in He-

Hepatic affections of the skin, generally curing the disease, but it has produced bad effects & colicky pains. When applied to an excoriated surface, the ointment produces stupor, Delirium &c. as was the case in a woman who had her blisters dressed with this ointm^t — My Extract is thus made — The full grown leaves are put in a flannel, the juice squeezed out in a wide but thin shallow vessel, & then collected, taking care to exclude the sun

Nicotiana or Tobacco

This is a native of North America. The Indians esteem it as a religious plant. The Tobacco has been used as a medicine in Epilepsy. Dr — informs us that he saw a patient cured of Epilepsy by an injection of the decoction thrown up the intestines. — I have no doubt but it may be employed with advantage under certain Circumstances in Tetanus & Hydrophobia. —

Atropa Belladona or Deadly Nightshade.— This is by far the most powerful Narcotic ever employed, its active parts reside in its root leaves & berries — Six sweet berries eaten by children thro' mistake. in 1/2 an hour after they have eaten it, they are inebriated, delirious, experience distressing thirst, furor, gnashing of teeth, convulsions, swollen faces, & the irritability of the Stomach is so much destroyed that 1/4 gr. of the best Tartar Emetic has been found ineffectual in exciting vomiting. The most effectual method of saving the Patient, is by large doses of Emetic. White Vitriol is perhaps as effectual as any other, & perhaps more so. Those who have eaten it, often experience difficulty to discharge urine, pulse more frequent & full than natural. Infants after taking a dose in proportion to their strength, experience no inconvenience except a little redness of the fauces. But those who take it in large quantities, & more than their strength can bear, experience

more redness of the Fauces, great loquacity after
which they fall into a sound sleep. Dr Greeding
used the Belladona in Epilepsy but never
found it to perform a single cure. He says it
is greatly allied to he used the extract
mixed with the powdered beaver beginning
with ½ gr. & increasing to 4 & even to 10 grs
a dose. It has been used externally with
advantage for a number of years in
Cancerous affections. Dr gave great praise
to its internal use as a Remedy for Cancer.
Cullen tells us he had a cancerous lip cu-
red by it. Dr a Danish Physician speaks
highly of it as a remedy for Tuspis
Convulsiva. he says a patient began the use
of it directly after the onset of the disease &
it finished its course in a few days, but if
it was not resorted to for some time after the
attack of the disease it was necessary to per-
sist in its use longer. It has been taken in-
ternally just before the operation for Cataract

for the purpose of dilating the pupil of the Eye

Laura Cerasus or Cherry Laurel.

It is a Species of the Plumb or Cherry. Dont confound it with our laurel of this Country. Dr Cullen thinks it a Sedative of the most powerful kind, & accordingly he has placed it among his Sedantia immediately after Stramonium Darwin has placed it amongst his Incitantia. I have had no experience of it myself, but I think it is a powerful Stimulus. It is known to produce Tetanus & Convulsions, & there are proofs of its Stimulating effects. Cullen remarks that the Cherry Laurel operates on the Nervous System different from Opium. In common the effects of Opium is to induce Sleep, but this is not the case with the Laurel. Here the Dr as in all other cases, has neglected the primary effects of Opium, & rather suppose their operations are similar from the Commencement. C. Laurel destroys the mobility of the Nervous System without exciting

inflammat^{n}, or producing a change in the fluids. D^{r} — in England says that he used it with advantage in Intermittant Fever, but unfortunately has said nothing of the dose Dr Darwin pulverised the leaves, & made them into pills containing 1ʒ — He gave one of them every morning to a Hysteric Lady with advantage. In Dispections after death there is no appearance of Inflammation of the Stomach, but the Lungs & veins are distended with Blood. — Its active powers reside in its most volatile parts. When distilled in water, it gives out an Essential Oil — used in Custards. —

Conium Maculatum, or

Spotted Hemlock belongs to the order of Umbilliferous. It is a native of all parts of Europe, but I am doubtful whether it is an Indigenous of America. however we frequently meet with it about barns & Dung heaps, growing in what the Chemists call Nitrous Soil. Some Physicians have collected & used a plant of a very

different Quality, mistaking them for the Hemlock
Conium Maculatum — with black spots like
rust of Iron = may be distinguished fm the Umb =
billeferous plants, by the green colour of the low =
er leaves, & by the smell of mice. — Dr — in his
Dispertation says, that if the expressed juice of the
Hemlock is evaporated, it affords Crystals of the
Nitrate of Potash. The Hemlock is poisonous to
the greater number of Animals that eat of it.
The Goat eats this as well as all other Narcotic
substances with impunity. The expressed juice
was used amongst the Antients to destroy life.
Dr Darwin has placed it among his class of
Incitantia, but seems to be doubtful whether the
arrangement was proper or not, fm its being
weaker than Opium, Stramonium & other Stim =
ulants. I have no doubt of its being weaker,
but it has the effect of increasing the Arterial
System, producing tightness of the breast, Car =
dialgia, Nausea, Vomiting, Singultus, Aphonia,
Delirium, Madness, Convulsions, Blindness,
a large flow of urine & loose stools. Dissections of

Animals that died from eating it shew that the intestines are inflamed: Bush says that it will salivate as soon as Mercury. In 1760, Stoke cured a number of Cancerous affections, he began the treatment with one or 2 grs a day & increased to ℈j in 24 hours. Bergius says from what experience he had in the exhibition of this medicine, he finds it rather injurious in genuine Cancer - but one of the most successful medicines in Scrophulous Cancer. & in the cure of Venereal Ulcers. Dr Adams in his observations on Morbid poisons, remarks altho it is uncertain, it is a highly important medicine, especially if the sore be attended with great irritability of the System. - Dr Hamilton cured a Cancerous Scrotum by bathing the part in the bath before mentioned - the 1st bathing relieved the pain - the 2d changed the discharge from a Sanies to a Purulent, & in one Month the patient was perfectly cured. The Dr recommends an injection of the extract of Hemlock

when the ulcer is so situated that the applications cannot be likewise made. There are some kinds of Ulcers whether Cancerous or not in wh. Physicians have found Hemlock in some form or other, one of the most beneficial Remedies, particularly in the Cure of a certain Species of Sore legs & Ankles. — Every part of the Hemlock may be employed in the practice of Medicine. I know but little of it fm. experience. I used it in Cancerous affections of the Scrotum as an injection; the patient also used it internally it acted as a palliative, & the patient received considerable relief; tho' he ultimately died. Whatever may be the effects of Hemlock in genuine Cancer, there is a variety of ulcers in wh. it has been used with advantage. Opium tho' it is acknowledged by all to be an excellent Medicine in Scrophulous Cancers; Bush & many others give the preference to Hemlock. I have used hemlock with advantage in 2 or 3 cases. The first was in 1790 - my patient had a number of ulcers in his

arms & neck. She begun with small doses & continued the use of it until she took 40 or 45 grs in a day & was ultimately cured. Hemlock often produces a desquamation of the Skin when taken internally, & the same effects have been produced by Opium. Ratton informs us that he used it with success in a Species of Lepra. It has been recommended by Mr Hunter in genuine Syphilis. & B. Bell speaks highly of it in those cases it succeed the use of Mercury in the Venereal disease, especially if the Patient be much emaciated. Mr Bell says he has found it useful when all other medicines have failed. The recent expressed juice was taken internally, or Ointment was made & applied to the ulcers. It has even succeeded when Cinchona has failed. Dr Butler in his observations on cases of Gonorrhœa Virulenta says that many were cured with Hemlock when taken internally to the extent of 10 grs to a dose. I can say nothing of its mode of Operating when given

V.

in this disease, from my own experience. Withering said he found it particularly useful in Chronic Rheumatism - I have also witnessed its efficacy in this Complaint - it soothes the pain & is much less dangerous than Opium

In Tussis Convulsiva, Hemlock has proved useful in the hands of some Physicians. Dr Butler gave it in small doses in a watery vehicle about 1 gr a day to a child of 6 years old, & to those of 20 or upwards 10 grs I think it a useful Medicine in a variety of Cases, but the extract is often prepared in such a slovenly manner that it often proves inert - I may here remark that the bearing & preparing the Digitalis has the same effect upon its efficacy. Its proper situation is in a shade, in a dry sandy barren, & gravelly soil. The leaves of Hemlock shd be gathered about the end of June or the 1st of July - the small green leaves shd then be picked & thrown a way they shd be kept in bags or drawers, & kept out of the sun from 15 to 25 grs after some use may be taken

twice or thrice a day —

Section 2d Sub-Narcotica.

By this term I mean such Stimulating medicines as altho' they do exert a Narcotic power it is in a less degree than those I have just treated of & first of

Camphor. — I have no hesitation in placing this among the Stimulants, tho' I have Cullen's arrangement. It must be confessed that the Stimulating effects of Camphor are not so great as some of Cullens Sedantia neither is it so great as Belladona, or Hyoscianus Niger. Camphor is produced from different shrubs. The reason it has not been more used in the practice of Medicine is that Physicians have not made up their minds with respect to it. Camphor is obtained chiefly from a tree called Laurus Camphorata, also from the Sassafras, but it may be obtained from a number of other plants as from Thyme, Rosemary, Sage &c

The tree grows in the Island of Japan, Ceylon, is a Native of the East Indies & the Cape of Good Hope. It grows to such a size that 2 men can scarcely reach round it. The inhabitants fall the trees, cut them into 5 or 6 feet in length, & split them into rails. The Camphor presents itself & is scraped off in a pure state with an instrument for that purpose. This is called the Head Camphor. The 2d is scraped off containing a considerable quantity of wood. This is called the Belly Camphor. The 3d is still more impure & is called the foot camphor. The Head is in a perfect State of Nature, of the Consistence of Chalk, is reducible to powder between the fingers & thumbs, the taste is Cold & Aromatic, & suppresses Nausea, tis indissoluble in water. On distillation it yields almost its whole weight of Oil. The most of these properties belong to the Common Camphor of the Shops. tho' this last is bitter & sometimes produces Nausea. 2i of the Native Camphor to ℈ss of Cinchona is more efficacious than ℈ij of Bark without the

the Camphor. The best camphor is bitter Aro=
matic & so light in water, when exposed even
to a moist atmosphere it evaporates consid.
erably, & greatly in a dry air. When closed in
a bottle hermetically sealed, it does not lose
any of its weight. It is very readily dispolved
in twice its weight of Rect: Spt Wine- When
water is added the Camph: is precipitated
By long trituration it combines with Gum
Arabic, is soluble in Mineral Acids, Nitric &
Muriatic Acids - By distilling with an acid, we
obtain Camphoric acid, 8 parts of Nitric to 1 of Cam=
phor - distilled with clay it affords a beautiful Yel=
low oil. ___ Rub down Camphor with G:
arabic, Mucilg & water - The formula is as
follows

Camphor -	℥i	
Mucil ___	℥ss 25 or 30	
G Arab: ___	℥ij	
Sugar ___	℥ij	
Water ___	℥iv	

Effects on Animals Insects &c The common

Camphor of the Shops is most exclusively the pro=
duction of the Sassafras. Camphor possesses a Vo=
latile oil, rendered Concrete by Carbon. The
greater part of our knowledge is derived from 2 Bal=
iaus. — A piece of Camph: was laid near a
hole where ants were observed to frequent, a
number of them were found destroyed before
they could return, & those as soon as they came
within smell of it, ran about as if they were
distracted. It had a similar effect upon flies,
Musquetoes & Wasps. It destroyed every insect
wch subjected to it, except the moth. The symp=
toms were generally Langour, dulness, Stupor
Torpor, Convulsions & Death. They are more rea=
dily destroyed in Summer than in autumn
by the vapours of Camphor. From the experiments
of Cairncati we learn that the vapours have
much such effects upon frogs. The those ex=
periments are by no means Conclusive of the
effects wch those vapours wd produce on Man,
because Sugar wch is nutritious to man & other
Animals, has been found very deleterious to frogs

I come in the next place to mention its effects upon Animals nearly allied to man in their internal Mechanism - I mean Birds &c

On Pidgeons, Quails & Rabbits Camphor produced violent effects - Stertorous breathing, singultus, Epilepsy - Vomited Purged, Salivated & sometimes killed Carminati made many experiments to ascertain the effects of Camphor upon Dogs Sheep &c - They were various, neither were they constant upon the same Animal. In some it produced mild intoxication, in others a furious disposition - 3ij rendered a dog so furious that he was killed - another had Hydrophobia, but recovered - In some it produced an increased flow of urine. It was also observed to destroy birds very easy, while a much greater quantity is requisite to destroy Sheep Dogs &c Dissections of Animals killed by camphor exhibit the Follow[g] appearances. Stomach inflamed, a preternatural quantity of Pus in the Trachea, membranes of the brain inflamed, also

the Heart & Arteries. Bile thrown into the Duodena. From these experiments we see the similarity between the effects of Camphor & opium Camphor thrown into the rectum by injection is found to produce the same effects as when taken by the mouth — Dont these effects proclaim Camphor to be a Stimulant? — Dr Cullen placed Camphor amongst his Sedantia — this is owing to his overlooking its primary effects From these experiments we have recited it will seem that its active power resides chiefly in the vapour & acts on the brain & nerves. Because Camphor is often found in the Stomach after death, undissolved. I am however of opinion that a portion of it is sometimes absorbed in the Circulation. & Dr Cullen & Mr Azone tells us that the smell of Camphor was perceptible in the perspiration & urine of those who took it. We have further evidence of this from the experiments of Monro upon frogs — he applied a piece of Camphor to the hind leg, after remaining some time he cut the frog in two, & tasted

the fluids of the fore part, & discovered the presence of Camphor. — It produces inflammat^n of the Stomach, & deprives the Nerves of their sensibility. —

On Vegetables. My experiments in — 96 establish, or go to establish Physiology in the vegetable Kingdom. The 4th I made with Camphor, Nitre & Iron, shew 1st That the action of Stimuli is undoubtedly the same on Vegetables as on Animals

2d That animals & plants are governed by the same laws, or that life is the same in both. —

3d That Stimulants do not act exclusively on the Nervous System. — See Transact^s Phil: Society. —

On the Human Body. Dr Physt relates the Case of a Man who took ℥ss of Camphor, in a small portion of sweet oil — he was seized with a burning of the Tongue, congestion of the Head, dimness of sight, & an increase of the fulness and frequency of the Pulse. The heat of the System is sometimes decreased — Vertigo & Tinnitus Aurium are also among its effects — 10 grs or ℥ss every 3 or 4 hours, in putrid bilious fevers; decrease of

the heat of the skin, small intermitting pulse, tremors & stupor, were all effects observed by a Danish Physician. It has been thought that it is of a cold nature, as Hoffman endeavoured to prove in 1714. he says it induced a coldness about the Pericordia. Fraser also entertained the same opinion, but yet he confesses it excites a Stimulating quality under certain circumstances, as in Cholera &c. Cullen. Duncan says he has seen many persons who had taken large doses of Camphor with a red face, a full pulse, inflamed eyes, convulsions &c. Monro appears also to have had a just notion of Camphor. it sometimes produces eruptions & mortal phrenzy. Dr Quincey says its effects on the Palate appear to make it a Stimulating medicine. Dr Wright says, the appearances it produces shews it not to be a cold medicine, but not as hot as some think. I have no doubt that it is a very Cordial & Stimulating Medicine. —

Diseases in which it is employed. —

Intermittent Fever. I am surprised to find Camphor has been so little used in this fever I think it will be found of great utility given to the extent of about 10 grs just before the expected Paroxysm — Those having early tendency to Typhus before the Paroxysm to 8, 10, 15 or 20 grs must be beneficial. Senac tells us he has seen its good effects with Opium. The powers of Bark are much augmented by its combination with Camphor.

Nervous Fever here Cullen says it is good In Typhus Fever accompanied with Delirium & watchfulness, it is an excellent medicine Dr Cullen used it with much advantage. Pringle speaks much of it as an Antiseptic he says 2 grs will preserve meat from putrifaction, better than 60 grs of the best sea salt — So we may suppose in Putrid Fevers wh are low Typhus fevers it is very proper. It is an excellent medi: in the Jail & Hospital Fevers, but it shd be restricted to the 2d or 3 Stage according to Pringle

it is also a further proof of its Stimulating effects.
Dr Huxham speaks highly of it in putrid fever—
It promotes pleasant Diaphoresis & brings on easy
sleep when opium has failed - Juncin says it is
injurious in the inflammatory Stage of Typhus, &
is only to be used when the System is prostrated.
Bark & Serpentaria are combined with it. Cam-
phor is much celebrated as a remedy in Gan-
grene - When the gangrene is of the dry Kind, the
greatest advantage is to be obtained fm a large
dose internally taken, at the same time a Lo
tion with G: Arabic applied to the gangre-
nous part. But when gangrene is of the wet
Kind, the greatest advantage is obtained fm a Lini-
ment. When the gangrenous part is situated
within the Rectum, or so, it sh.d be then used
as an injection. The virtue of Camphor does not
depend on its Antiseptic property, but upon its
being a powerful Stimulant. It is peculiarly cal-
culated for the cure of those Gangrenes wh. form
in the decline of Typhus. It is proper, just in those

stages in wh opium is used. The success wh attends the application of poultices of Jalapas, depends probably upon the quantity of Camph: it contains

In Obstinate Ulcers in the lower extremities Colin tells us Camphor is beneficial. —

Confluent small Pox. Rosinteine says anoint the skin with Matter of Pomatum, & mix Camph: with it, it has no effect; but when our Article is omitted, it produces decided effects hence says he, it is proper to defend such parts as the eyes &c by a Solution of Camph: & that it will also prevent the pitting. Dr Jenner observes that the fumes of Sulphur will obviate the effects of the Vaccine Matter. I inoculated 2 persons with good Variolous matter, & smelling Sulphur in the room, I suspected there was some Cutaneous affection, & on enquiry, found it to be so, wh prevented the matter from taking effect

Malignt small pox Haller first used it here I shot combined it with acids. In

Chronic Cough preceding measles, Houfland

found it highly beneficial. In acute & inflammatory diseases Hoffman & Willich has recommended Camphor. We are told that Vs. diluting drinks & Purges are the remedies generally used in inflammatory diseases. & in such Camphor can only be used with safety in Combination with Nitre wch promotes a determination to the surface. — In Pneumonia it has been used in this way. In many cases of Pneumonia Superile Fever, where it produces perspiration, it may be proper. Camphor has been used in inflammatory diseases of the heart. It is strongly recommended by Dr — beginning with 1/2 gr at a dose, but always in Combination with Nitre — It has been used in a French writer tells us with the happiest effects when given in large doses — indeed there are cases in wch it may be given with great advantage, but there are also cases that require large & copious Vs. & in such cases, camph: wd be improper & highly dangerous to the Patient, especially if given

in large doses. In

Acute Rheumatism it has been used with V.S. & cooling purgatives in every stage. Cullen says when tending to the Chronic form, it is beneficial. Cullen tells us he has known the Oil of Camphor used in Acute Rheumatism with a view of relieving pains in the Muscles, but generally with the effect of translating the disease. When the application was made to the part to which the disease was translated, it had the effect of relieving it with a return in the part primarily affected or some other part. In Acute inflammatory Rheumatism, it is of little use, & even dangerous. Independently of what I have met with I can't help thinking it injurious, & I think much more relief has been done by the external applications of Camphorated Linaments. In a Negro boy who had Rheumatic pains, he bathed the parts with Camphor, & in the morning was dead. In a Numbness or partial Palsy of the left arm, I used Camphorated

liniment, & the other arm had the numbness, to a^t ches applied. salivation of the tongue was induced. It sometimes causes a translation to the heart, it is proper therefore in many cases of Rheumatism to avoid Camphor externally. Cut in a Gouty affection of the Head, Stomach or Breast, the application of Camphor may cause a translation to parts of less importance. Dr Ferriere used a solution of Camphor externally in Lumbago with advantage, & in pains of the joints of 7 years standing, & in a case of Rheumatism white swelling, the pain was always relieved by a Spirituous solution rubbed on the part. In Gonorhea, Hoffman & Mers speak in high terms of an injection of a solution of Camph: but I have long since laid this practice aside, finding it not answer my expectations. —

In Chordee M^r Bell speaks highly of a Liniment of Camph: & oil. In Bronchocele in the form of a Liniment it has been used with advantage. —

Gentian has been combated by Camph. It is occasioned by the same Marsh exhalations wh produce Intermittent & Remittent Fevers In Spasmodic affections it has been of service In Epilepsy, Cullen speaks highly of it, he continues I have never known it cure, but it has prevented many expected fits - taken in large doses in combination with Cuprum Ammon: - I have had but little experience of this medicine myself, but suppose it may be advantageous in Periodical Epilepsy, given 2 or 3 hours before the expected paroxysm. -

In Chorea St Viti. Dr Wilson relates the case of a girl who began with ½ gr 3 times a day, gradually increasing it until she took 18 gr 4 times a day - It ultimately cured her. -

In Tetanus, camphor has has not been much employed - yet we hear of wonderful effects

In Convulsive Asthma Camph: in a fluid form has been of service. The Julep, 1 or 2 Table spoonfuls may be given every 3 or 4 hours, or

as often as the fit returns. — In Spasmodic affections of the Oesophagus Hoffman used it he supposed it was a Sedative. —

In Painful Menstruation as an Anodyne, in the dose of 10 grs Camph: has been used.

In Mania & Melancholia it has been used. This practice is of ancient date. Theophrastus & Paracelsus used it. In those attended with Plethora &c. Purging, & the Antiphlogistic Regimen will be found to be the proper treatment. Cullen relates the case of a young man, who was bled, purged, Blistered, &c without effect, in whom Camphor effected a cure. The dose was first 5 grs 3 times a day, it was increased to ℈ij when the dose was at 40 grs no evident effect was discovered. But when increased to 60, his sleep was more easy, he was less loquacious & was ultimately cured. I think it probable that the reason why Physicians have failed with Camphor, is owing to their not giving it in sufficiently large doses. Dr Heberden speaks of the efficacy

of Camph: in Mania. Since the publication of Ferriere's paper it has been more employed in Mania. See Cullen. — 3ß is often a large dose to begin, & in fact after it has been continued some time, 4ß or 5ß has produced disagreeable effects. I have often exhibited Camphor in Mania with essential service, but not with the success I expected. In one case it seemed to increase the inflammatory symptoms of the Brain. In one case of Mania Melancholia accompanied with taciturnity, it seemed to perform a perfect cure. It salivated my patient, she recovered, & afterwards died with the Yellow Fever. In examining those cases in which Camphor has been most advantageous, they were young & strong people — plethoric Constitutions. here I think it must be injurious. — But when the Countenance is Pallid, pulse slow & torpid, it appears best. Melancholia Mania will more readily yield to it. —

In Furor Uterinus it has been advised

on the Suppostion of it's allaying the Venereal appetite. It depends on a Plethoric state of the System & a peculiar Sensibility. — Externally in Burns, dissolved in G: Arabic & applied it has been much employed. —

In Combination. — Collin & Azone says it moderates the Acrimony of Drastic Purges as Gamboge &c & has a remarkable effect on Opium — As in Ulcers, Opium is prejudicial, with camphor it is not — Dr Cullen takes notice of its preventing the deleterious effects of Opium. It prevents troublesome dreams, subsultus tendinum, & has been said to decrease & sleep &c This is not very probable. —

Camphor combined with Bark, increases its powers, makes it more effectual in the cure of intermittents — & I think it a very important Medicine in Typhus. —

Combined with Mercury, it is said to moderate its acrimony by abstracting an acid, & prevent its Salivating. Lazone says it increases its powers. 'Tis highly extolled in Hepatic

affections, & in old Syphilitic diseases. It is said by some writers to diminish the effects of Mercurial Ointmt ℈i of Camphor to ℈i of Mercury. I am far fm wishing to discover a medicine wh will prevent the salivating effects of Mercury, as I am of opinion that the venereal disease can never be thoroughly eradicated fm the system without exciting a Ptyalism but I believe Camph: has no such effects. Dr Cullen says it has not. I have often combined Camphor with the Mercurial Ointmt in a great many cases. & fm my observations ℈i of Mercury to ℈i of Camphor will act more speedily than Mercury alone. In a Cancerous like affection of the Scrotum wh came under my care, the ulcer was extensive, & fast spreading, & discharged a sanies Matter. Merc: Ointmt Bark, & every thing wh I could think of, was applied without effect. I combined the Mercurial Ointmt with Camph: & in 3 days the patient was considerably relieved, & in 3 weeks

was completely cured. Camphor has been used with great advantage in relieving distressing symptoms from an overdose of Medicine such as Squills &c. It is generally supposed to possess an Anti-Strangurian effect. Heberden said Tr of Camph: seemed to produce it. Rubber anoint the part with a camphorated Solution to prevent the effect of Stranguary from blisters, before their application. It allays the pain of difficult Menstruation, & I believe never produces Stranguary. Dr Huxham thot Camphor blunted the Spicula of Cantharides. It is not now as common as formerly to use a Camphorated Solution before the application of blisters. Some suppose it actually prevents Stranguary. Others that it possesses no effect. I place my principal dependance on the warm Bath, & where this cannot be had, bottles or Bladders of warm water applied to the region of the Bladder. Opium also may be used with advantage & Sinapisms to the wrists & Ankles. Dr Home

tells us a Strangury fm blisters was obviated by Camphorated Oil. Dr Wilson's Anti-Strangury is Uva Ursi in the Shape of tea. I have also used this with the greatest success. In a young lady in whom Blisters always did produce Strangury, coming on 2 or 3 hours before the Blister was removed; I applied the Blister, used the Uva Ursi, & no effects fm the blister was produced. After preventing it twice. I omitted it the 3d time & a Strangury did actually come on, wch was then removed by the Uva Ursi.—

Morbus Pediculatis in wch tumours are dispersed over the skin, in wch there are insects found Sir Wm Walnut used Turpentine & Camphor wch destroyed the insects & relieved the Itching. Dose, 1, 2, 3, 4, or 5, to 20 or 30 grs One, two or three times a day. When given in small doses it does but little good or harm, but in large doses advantage may be derived fm it. Camphor in an uncombined state does not sit easy on the Stomach. It is given combined with Sugar, G. Arabic, or Something else to

make it agreeable. The most agreeable form I have ever yet used is the following

℞ Gum Camphor —— ℥ij
Gum Arab: ———— ℥iv or
Gum Myrrh —— ℥ss
Aq: ———— ———— ℥VIII or X. a table=

spoonful of ea. may be given every 2 or 3 hours. —

The Diuretic & Diaphoretic property of Camphor is increased by combining it with Opium. D. recommends the following mode of exhibiting it. — ℞ — Camph. — — 15 grs

Ol: Cinnamon 3 grs of ea. make a bolus. — I think the fluid form is preferable to any other. — In treating of Anthelmintics, I shall give Camphor its proper place. —

Musk. —

This is the product of an animal nearly allied to the Deer. It is a native of different parts of the old world, Siberia & Thibet &c. its favourite abode is on the tops of the loftiest mountains covered with Pines. The sac or cream containing the brown unctuous matter

is found about the middle of the Abdomen.
The farther we go to the South the greater the de=
cretion of this fluid. As soon as the Animal is
killed, the sac must be cut off, & a ligature ap-
plied round its neck; it is then hung up, where
it remains until it dry, & fit for sale. Tis of a bitter
fragrant taste, composed of resinous & gelatinous
parts, & contains a certain Saline matter. The odour
is so violent, that it has been known to force blood fm
the Ears, Eyes & Nose of those who have inhaled it.
Musk is often Adulterated with pieces of lead to in-
crease its weight. When triturated with alka-
line salts, it gives out a smell of volatile alkali.
Musk is wonderfully diffused thro' the Animal
kingdom. I have discovered the Odour in the
Human Species, in Rats, Moles &c. It has been
used in a great number of diseases. It increases
the Pulse & frequency of the pulse, & raises a di-
aphoresis & not much heat, says Scaler. Pringle
has used it with advantage in
Gout of the Stomach he says that Opium

itself does not procure relief more readily - I have used it frequently in retroceedent Gout when it affected the Head & Stomach & think it of more service than almost any thing else - It sh^d be given in very large doses as^n may be diminished as the Spasms go off. M^r Desportes relates the case of a Lady cured by musk, after she had taken Potid quens & used the cold bath without advantage. - She began it in pretty large doses & increased so as to take ℥ss every 4 hours - After she had been using it for a short time - She took the first dose immediately before the Spasms came on & they were considerably checked & after some time she was perfectly cured. - Cullen has found it very effectual in this kind of Gout when given in large doses. D^r Hillary found it successful in large doses when combined with opium. These medicines combined are much more effectual in this State than either alone. It will be proper to discontinue these medicines until some time after the Spasmodic affection of the Stomach ceases. -

In Tetanus. D^r Hillary often prescribed

it in large doses of Tetanus in combination with Opium

In Hydrophobia, we have derived it from the Chinese who combined it with Cinnabar

Musk — 16 gr

Cinnamon ℈j — They gave the third of their first to adults, & after a few doses are taken they increase it, so as to give the whole for a dose. It produces a suspension of the symptoms & restless sleep as well as taking off the dread of water — I cannot deny the efficacy of Musk in Hydrophobia. Dr Hillary has mentioned some cases where the Patient were ad deliquium animi, cold water were thrown upon them, & afterwards they were treated with large doses of musk combined with Opium — He says it is a good preventative — Lenten days 48 gr of Musk have proved beneficial

In Pertussis we find it recommended

In Colica Pictonum Dr Hillary speaks of it in high terms combined with opium. Dr Cullen says he found it more effectual than any

then Medicine. I have seen one cure from the use of it, & no doubt shd have seen more had it been given in sufficient Quantity

In Mania Callen says Mania is much relieved by it. —

In Subsultus Tendinum accompanied with Typhus Fever, it has been used with advantage.

Small Pox, when Confluent has been much benefited by it. —

In Gangrene & Mortifications, musk has lately been used. There is a case related by Dr Simmons, where Opium, Wine, Bark & Ether with external applications failed, Musk was given, 10 grs 3 times a day with an equal portion of Ether, & the patient recovered. I have never used it myself, but think it may be a valuable remedy. Few medicines are more adulterated than Musk, that wh is only is most indifferent the genuine is generally mealy & crumbles between the fingers. It is adulterated with the Blood of Animals & many other things. Musk is only to be relied on when given in large doses. Dr Wall says that it is rarely effectual unless given in doses of 6 grs for that to

to 10, & often repeated Cullen says it the dose given from 10 to 20 or 30 grs often repeated Traler in 1783 endeavoured to prove it was entirely inert

Artificial Musk was recommended first by Bargrave, & the form of emulsion is the best mode of exhibition. The process is to pour Zijss of Nitric acid slowly upon Zi of recent oil of Amber. After suffering it to stand 24 hours a yellow substance was found upon the top wh is washed till it is freed from the acid. It has been said to be of advantage in Epilepsy I never used it. It has been greatly recommended in Hooping Cough & Diabetes Mileter we hear of its good effects.—

Castor.—

Castor is generally obtained from 2 small oval bags near the Anus of the Beaver, but the 2 upper are those wh furnish us with the Castor of the shops. 'Tis of a strong & not disagreeable smell, & a biting bitter taste. Cullen says it is a powerful Anti spasmodic in large doses he has given from 10 to 30 grs in Epilepsy both the Ancients & moderns speak in high terms of Castor. In Epilepsy & Convulsive

affections. Van Swieten & De Haen found it efficacious. As a nervous & Antiseptic medicine, it has been long celebrated. It has been given as a Cordial in all diseases of debility. It shd be given in large doses - The tincture to the extent of Zi every 2 hours - It ought to be given in substance from 10 grs to ½ℨ or ℨi. It is a Narcotic Stimulant I never employed it till lately. —

Crocus or Saffron. —

I know little of this medicine from experience. It is much recommended by many Practitioners It is much used by women during the Eruptive stages of small pox Measles & Scarlatina, they say it helps to drive them out. It is a peculiar substance, & the virtues may be extracted by a watery or Spirituous Menstruum. Dolland Monro says it exhilarates the spirits & produces sleep. —

In Hysterical & Hypochondriacal diseases he says it is beneficial, It is used in emollient Poultices. Cullen does not think very highly of it.

It produces eruptions on the body like those produced by Opium. I have used it in substance & extract, but the saffron of the shops is generally so indifferent that I am unable to determine as to its goodness. —

Valerian. — —

This is a perennial vegetable & grows in woods & marshes. It is certainly an Inebriant but has not any Narcotic power. The root is the part used in medicine - it has a strong & not disagreeable smell, to me it is agreeable, of a warm, bitter, sub-acrid taste, not very stimulating Its effects on the Pulse have not been sufficiently attended to. It is a Diaphoretic & Diuretic, & when given in large doses it Purges & sometimes vomits; but I spot never observed this in 18 Years practice Some writers say that it weakens the Stomach, but this dont appear correct — but when given in large doses, it produces little Anxiety, tho I have never seen any disagreeable Symptoms fm

its use. Its odour is very agreeable to Bats

Epilepsy. It has been long used in Epilepsy since the time of Fabius Columbus who was cured of this disease by it. Its reputation in this Complaint is now established. It is more peculiarly adapted to Epilepsy arising fm menstrual obstructions. Quarin thinks the patients are not sufficiently attended to, or Valerian wd not do so often fail. Wepfer informs us he cured a case of Epilepsy by a Continual use of valerian alone. Lentilius speaks of it as a valuable medicine in obstructed Catamenia. Dr Cullen thinks it a valuable Antispasmodic & says it shd be given in larger doses than it generally is. Marchand also speaks of it with respect in Epilepsy - he gave it in a dose from ℈ss to ℈ij in powder: it acted as a diuretic & Cathartic. He generally gave it as an opening medicine - he sometimes put off the fit, & then it effectually cured, who discharged large quantities of worms - Haller speaks favourably he generally used the Powder & he cured a young

Lady of Epilepsy by the juice. This disease how-
ever often depends on Organic affections, wh are
not to be removed by any Medicine. Dolland
Monro says he has never cured Epilepsy with
it, & that the 2 cases of Marchand depended on
worms. Haller speaks of its efficacy in Hysteria
Epileptica. I have found it effectual in Hysteric
Epilepsy when all other remedies have failed. I used
it in one case in wh it purged in the dose of ℥ss
a day - in this case, it is necessary to add a few
drops of Laud: - In other cases also with good suc-
cess, protracting & putting off the Paroxysms. I gave
it to a boy of 10 years of age who had been afflic-
ted with Epilepsy for some time, whom I had
previously bled Purged & I had also given Ca-
lomel, not with a view to Salivate him, but
it had that effect - after this had failed I gave
him the Valerian ℈ss twice a day wh brot away
large quantities of the round worm & cured him
In 2 other cases I used it without any benefit. -

In Chorea St Viti. This disease often de-

pends on worms, a cause I little suspected, and when this is the case, Valerian is one of the most valuable Remedies - —

Hemicrania. Dr Fordyce in his dissertation on Hemicrania recommends Valerian to the quantity of 1 or 2 3 or 4 times a day, to be continued for some time if the Stomach will bear it. It seldom fails of Curing, when I have employed it I give it in pretty large doses. Cazvinato adds his testimonies also. But when Hemicrania returns periodically, it is more effectually removed by bark, or Bark & Valerian Combined. —

In Dimness of Sight & other affections of the eyes it has been much Celebrated, & particularly in Gutta Serena - Richter thinks this disease generally depends on an Arthritic affection of the Stomach, & not upon an affection of the Optic Nerve - Hence he pays his particular attention to the Stomach. But there are many cases which depend on an Organic affection of the brain - It has been used with success in Putrid Fever. I suspect it was the Typhus

Dr Meade says he found it one of the most valuable Cordials. he thinks it nearly equal to the Virginia Snake root. Valerian is an excellent medicine in Habitual Costiveness. it often loosens the Bowels when the most powerful medicines fail. It is highly recommended as an Anthelmintic. this is obvious from its curing Epilepsy depending on Worms 3ij of the root to Oij of Spt Wine constitute the tincture of Valerian. but the substance is the best mode of exhibition. Drs Rutherford, Cullen, & Others also prefer this form. I have never used the extract.

Coniferae.

To this Natural order of Vegetables belong the different Species of Pine.

Turpentine in its entire State is an acrid substance, inflaming the Skin. Cullen says it is a Rubefacient. It has been recommended in Flesh wounds as an application but I do not think it good except when they

do not take on the adhesive or suppurative inflammat^{n}. Distilled oil of turpentine has been first advised in Burns & Scalds by Mr Hewlett, relieving them in ½ an hour, & the pain & the burn protracted only for 2 hours Camphor has also been used in the same way

Internally, it is necessary to combine it with some bland substance, as Honey or the Yolk of an Egg, or in Pills. It often increases the heat of the Stomach & produces Nausea. It is seldom considerably purgative, but ℥ss triturated with the Yolk of an Egg & injected, is a most certain purgative. It enters into the Circulation, & sometimes passes off by perspiration, & exhalation from the lungs - hence it has been employed in ulcers of the lungs; - but stimulating medicines must be improper. - The smell of Turpentine being communicated to the Urine after it is taken into the Stomach, is a strong argument in favour of its being taken up by the Absorbents. Turpentine prevents Asparagus communicating its odour to the urine of persons

who have eaten of it. This fact was discovered by Dr Franklin. Boerhaave informs us that when Turpentine is Handled, it discovers its odour in the urine in like manner Stimulating injections ℥ss of Oil of Turpentine & warm water, until they produced Tenesmus, & it allayed the vomiting in Yellow fever. —

Gleet. — Turpentine has often been used here with advantage. I have used it with very great advantage. Gleets are sometimes removed by stimulating injections 15 or 20 drops of Bals Copau: or Turpentine. — Cullen used it in this stage — he says it acts by inducing some degree of inflammat^n upon the Urethra, even sometimes occasioning a suppression of Urine. Taken Under Affectionment of a gleet it^s had existed for some time was entirely cured. Some have been in the habit of using the most powerful Stimulants but I think they are frequently improper, & sometimes do much harm. — I give it in

substance in Pills, & in as large doses as the Stomach will bear

Fluor Albus. Turpentine has been beneficial here. Cullen says he never found anything good in Leucorrhoea — For this reason because he practised among the rich, & because few female Stomachs can bear that quantity of the Medicine wch might be necessary. —

Abdominal Dropsy. Dr Henderson relates a remarkable case of his success with Turpentine — The whole of its virtues depends on an Essential Oil — The Oleum Terebinthia wch does not excite as much inflammat^n itself. If rubbed on the Spine, an hour before the expected paroxysm especially, it prevents Intermittent Fever. When taken in the Stomach it excites heat & uneasiness. It is not as Laxative as the Turpentine itself. As a Diuretic it is sometimes dangerous producing Strangury & Bloody urine, & irritating the urinary organs — Excruciating pain in the back & loins, Delirium, & in 50 days Death, having

previously induced Dropsy. —

Sciatica. It has been recommended by Home Pitcairn & Others. — I gave it in Sciatica & effected a cure, but previously it produced a swelling, & cured by creating a new disease

In Rheumatism it has been used by Home & Others. — His recipe was as follows. —

℞ Ol Terebinth. — ℥ij

Honey —— ℥i Mix ℥i to be taken every morn^g & even^g Out of 7 Rheumatic patients 5 were cured & 2 relieved. It produced a sense of pain in the Stomach & increased appetite

In Hemorrhages of the Intestinal Canal the Oil of Turpentine has been used. It is not adapted to passive Hemorrhages as we sh^d have supposed from its being a Stimulant. The Oil sometimes produces Costiveness. —

Burgundy Pitch. has been found useful in relieving Deafness. It is to be covered with a bit of gauze, & introduced into the ear —

Acts in the same way that garlic does
1st By altering the secretion of the Ear, &
2d By giving tone to the Nerves. I have
generally increased my own hearing by the
simple process of stopping my sound ear &
suffering impressions to be made for some time
exclusively on the deaf one - I always found
this to increase my hearing very much in the
deaf ear. Burgundy Pitch Plaister is particu-
larly recommended in Tenia Capitis
Tenia Capitis or Scald head is a disease of the
roots of the bulb of the hair for wh various
remedies have been advised. - It is to remain
on until it becomes implanted in the hair,
then to be jerked off. - This is certainly a
harsh remedy, & there are many wh answer
as well & are less painful. -

Tar. -

Tar has been used in Hydrothorax, & is employ-
ed as a Diuretic in Hydropic affections. It has
been employed as an Anthelmintic particularly
in

dislodging the Taenia, being then triturated with the Yolk of an Egg. It is one of those medicines we have every reason to believe is taken into the Circulation; & when taken into the Stomach imparts an odour to the urine. Cullen says, handling will communicate the violet smell to the urine. The saliva as well as the urine, is impregnated with it. It is however certain that when externally applied, or internally taken, it shews itself in the urine. It has been denied that it is taken up by the Lymphatics.

Tar is half burnt Turpentine & is an Empyreumatic Oil of Turpentine. It differs from Turpentine, there is a certain saline matter which turns out to be the Benzoic acid. It is however Analagous to Turpentine, but is not so strong. —

External Application. Cullen says the external application of Tar in the form of an Ointment (by mixing 5 parts of Tar to 2 of Rosin) in certain ulcerations is not better than Oint-

ments with a more moderate impregnation of Turpentine, & he has found it beneficially invaluable to Cancerous Sores. Tar & Mutton Suet is an excellent application in Ulcers.—

Asthma & Old Coughs. Tar has been much Celebrated here in the Form of Pills. The Negroes of Virginia are much affected with Sciatica, & their dependence for relief is on the Tar pills — 50 or 60 years ago, Tar water made by adding a Quart of Tar to a Gallon of water, was thot to be a highly efficacious Remedy. Its Diuretic Sudorific & Catartive, & has been supposed to correct the Acrimony of the Bile. Tar water is a Valuable remedy for the Stomach, increasing the appetite & promoting Digestion.—

Scurvy. Tar water has been used here with a view to its Diuretic effect, & is certainly of great importance in the cure of Scurvy

We have now finished the true Conifera & proceed to those Articles wch are extremely

allied by their Virtues. but not by their Botanical Affinity.—

Balsam Copivae. This is very similar to Turpentine. It is the produce of a vegetable called Copivira. It is not one of the Coniferae. It has been recommended in Ulcers of the Kidnies & in Nephritis by some, while others firmly declare that it does harm, from its Stimulating power, it is evident that it is not adapted to diseases attended with inflammatory action. — It has been much recommended in Ulcers of the Lungs. Some writers tell us that in some cases of Phthisis it increased the Cough & exacerbation. — Dr Simmons gave the Bals. Copiv. or Peru either alone or conjoined, after suppuration had taken place. —

Gleets. Here it is a very general & often indispensible remedy. It is not very different from Turpentine. but sits better on the

Stomach, & may be given in doses of 10, 20, or 30 drops in Wine, or on loaf Sugar, twice or thrice a day — large doses prove laxative. In the West Indies it is given internally in Gonorrhoea mixed with the Yolk of an Egg. — I have not used it in recent Gonorrhoea, but in old cases where it is kept up independant of Inflammat^n of the Urethra I have found it highly beneficial. —

Formula for Injection. —

Calomel	———	gr. 4 to 8
G: Arabic	———	℥ 2 to 2 ½
Water	———	℥viij — 3 or 4 Injections

injected in a day. — It is adapted to old Gonorrhoeas. where there is a Scalding, no priapism, & where there is a Yellowish or Greenish discharge fm the Urethra. I have hinted at the laxative qualities of Bals Copiv. & here it is nearly allied to Turpentine. —

In Hemorrhoids it has been used with Succes? 20 or 30 drops 2 or 3 times a day dropped on loaf

Sugar. Here it acts by its laxative quality
This Balsam is stronger than most others —
In Colica Pictonum Sydenham ranks it
one of the most valuable Cathartics. —

Balsam of Peru. —

This posses a strong flavour & more powerful acri-
mony than the other articles called Balsams
It is the produce of a tree wch grows in Mexico
& Brazil, & is called Coniferae Balsam. The
true Balsam has a delicious smell, & is of a whi-
tish Colour, exuding spontaneously frm the Tree. —
The balsams we have in our shops is procured
by boiling the branches of the tree, & is of a black
or red colour. A thick Syrup is then obtained
By distillation with water, it affords an oil.
Van Swieten ascribes great efficacy to it in
wounds of Tendons & Nerves Cullen does not
entertain the same opinion of it. Sydenham
speaks highly of it as a laxative in Colica
Pictonum. Pitcairn cured his daughter of
Consumption by it. —

Guiacum.

This is a very important Article. The tree from which the Guiacum is obtained is the Guiacum officinale of Linnaeus, known by the name of Lignum Vitæ. It grows wild in the W Indies, Hispaniola, & S. America. It attains the height & bulk of a large tree. The wood is very hard & compact, & as we all know, very heavy - its specific gravity being heavier than that of water. The outer part of the wood is white, & gives out no smell, unless rasped. When chewed, it yields a mild Acrimony & Pungency in the mouth. Soon after the discovery of America, it was used as a remedy for the Venereal Disease, & 18 or 20 years after, in the 16 Century, it was much celebrated - it still retains some reputation in Italy. It is a true Gum Resin, & is brot to us in friable Masses. The watery extract obtains more resin & the Spirituous more Gum. The Spirituous Tinct: is of a deep brown Colour. Its reputation in the Venereal & Gonorrhoea is now much diminished

yet we find it still employed in France & England — There it is substituted for Mercury also Hunter applied the powder to the Venereal Ulcer. Dr Bell's testimony respecting its virtues is highly interesting. He says that taken alone internally, it will relieve some of the Symptoms of Venereal disease, but not effectually cure. In Syphilis combined with Scrophula & Gouty & Rheumatic affections, Guiacum has been much celebrated. Limering used the following Formula — Rum 3 pints, to Ziij of G. Guiac to remain in the Sun & shaken until it dissolve, dose a tablespoonful. It is said to have caused nodes to disappear & to have cured them. Dr Darwin strongly recommends it, he used the Vol: Tinct

Gum Guiacum ——— Ziv
Compound Spt of Ammon: Ziij

Dawsons Formula was as follows

Gum Guiac ——— Ziv
Spt Ammoniac ——— Ziij to be digested for three days & then strained — Dose 1 or 2 tablespoonfuls, 2 3 or 4 times a day. Dawson far ex-

ceded the usual dose. In one case it suspended the the attacks for 2 years & then produced Hydro=thorax. Hydrothorax was then not the consequence of the G: Guiac for nature often produces it with=out. The Gout in the W. Indies is much milder than that in Europe. My own experience in Rheu matism & Gout has been great. & in the former complaint I have often used the watery solution with decided advantage, & never to the injury of the patient. The follow^g is the Formula of Bergius.

Guiacum	℥ss
G: Arabic	℥j
Sugar	℥ss
Water	℥ix

Two Spoonfuls the dose. The Vol: Tinct: Gum Guiac: is not un=favourable to the tone or strength of the Stomach, but I have not used it in Dyspepsia. Dr Huston gave 10 grs Guiac: & 10 grs of Rubigo Ferri & 5 grs red Pepper 2 or 3 times in 24 hours to the prisoners in our City Jail in Dyspepsia attended with Co=stiveness. I have not used Bergius Solution

× In a Patient in the Hospital of this City affected with Rheumatism & Gleet. it produced so copious a Salivation, that he discharged 16 oz of Saliva in 24 hours

or Cullens preparation — My Formula is as follows

Rub down G: Guiac: ℥ij or iij
Loaf Sugar ——— ℥ij
Gum Arabic ——— ℥ij
Water ——— ℥x A tablespoon-

ful 6 or 8 times a day. —

In Chronic Rheumatism & Paralytic affections it has been used with advantage. — ✗

In Colica Pictonum I have often used it with much benefit. In 1791 when I employed it, I did not know it had been used by others, but I find Fothergill has spoken of it in high terms. — Dr Burgius in his Mat: Med: speaks of having frequently used it in this disease. In certain forms of Dropsy it has been much recommended. Out of this I have no experience

It has been said to cure Epilepsy in the W Indies but we must remember that Epilepsy is less violent there & more frequently cured by removing from a cold to a warm climate than by any thing else, except low diet. ———

Siliquosæ.

Under this head Linnæus comprised an extensive family of Plants. They are used in Medicine externally or Internally. I first of their

Internal Use.

Mustard & Horseradish are the chief. They have been used in Intermittents & a variety of other complaints. Bergius gave in intermittents, a tablespoonful of the unbruised seed of Mustard during the Apyrexia. He tells us he cured Vernal Intermittents, but was not successful in Autumnal Quartans. Efficacy has been ascribed to it in protracted Intermittents, when combined with Bark. The bruised seed of Mustard in Ardent fevers has cured fever, but this practice requires much caution. Rheumatism & Palsy are nearly allied. In Pure Chronic Rheumatism where no inflammatory symptoms exist, a tablespoonful of the unbruised seed has been used with manifest advantage. It seldom heats. Stimulates the intestinal Canal. Increases the secretion by the Kidnies. Tho' it don't always prove Diuretic. The

bruised Leaf is more apt to prove Emetic. I have given it with great advantage in Chronic Rheumatism, but then I always used large doses, as 2 tablespoons —

Horse Radish. It is cut in small pieces, & swallowed without chewing every morning. This is Bergius' method — he gave it thus in doses of a tablespoonful in Authentic cases of a Rheumatic kind.

Dropsy. Horse radish & Mustard act on the matter of the Circulation, increasing the quantity & heat of Urine. — There are many cases of Dropsy however attended with much fever, in w^h Horse radish must be prejudicial by its stimulating qualities — but where there is debility & a languid Circulation, it is highly efficacious. I think Dropsy often depends on a Paralytic or torpid state of the Intestines ——

Scurvy. — The siliquose plants have been found useful in Scurvy by stimulating or increasing the discharge fm the Skin & Kidnies. Horse radish has been principally useful, its

active matter is carried into the course of the Circulation. It communicates its taste to the flesh of those Animals who feed on it. It irritates Issues considerably, as I found in myself when I wore them for my Arthritic Affections. I mentioned that lime water was advantageously used in checking vomitings; I shall tell you hereafter that Asafoetida has been used for the same purpose. A weak infusion of Mustard in milk, or cold water, has been very successful in my hands, in checking Arthritic Vomitings particularly, & those vomitings succeeding large doses of Opium or Laud: I call it weak infusion, when it is made by 1 teaspoonful of Mustard to a gill of hot water, one to be given every hour. — Cullen thinks the table mustard preferable; but the fresh powder from the seed is preferable & superior. —

Externally. The flour of Mustard is combined with Rye flour & made into a paste by the intervention of Vinegar. The proportions varied according to the immediate effect you wish to produce In convulsions for teething in children - 2 parts of Mustard may be mixed with one of Rye meal

meal & good strong vinegar used. If you desire it weaker, you may substitute milk for vinegar. Mustard & Horse radish are very stimulating applications, inducing heat, redness, & distressing pain, so much so that Patients never keep under their operation. 1st They generally enjoy when Cantharides are used. If long on, they produce vesication. They act like Cantharides. There is little or no discharge of serum from them but in Cantharides there always is. The operation of the Siliquose plants then, depends upon their stimulating qualities. The Horse radish is more stimulating than Mustard, I've often find it beneficial to combine them. In the employment of Sinnapisms. Their evacuent effect must be kept altogether out of view, as they operate altogether as Stimulants or Incitants. & produce a new action, there being scarcely any discharge of serum. In Convulsions from dentition, they give relief almost instantaneously & are an invaluable remedy here. They act by creating a new action.

In the Convulsions attending the eruptive state of Small Pox they are advantageous. But in the first they are preeminently efficacious. When I am called to a case of Convulsions fm dentition, instead of using Laud: Vs I immediately fly to Sinapisms, & always with the happiest effects. I have used Sinnapisms in preventing the Recurrence of Epileptic Paroxysms & have often succeeded, particularly when they return at stated hours. They shd then be strong, & applied an hour or an hour & a half before the expected Paroxysm. This is highly deserving of your attention. In Epilepsies depending on mobility, or recurring fm the power of Habit, they are eminently beneficial. These often occur, & Sinnapisms are preferable to the Cautery of Haller.—

In Croup I have used Sinnapisms with great advantage.—

In Angina or Scarlet Sore Throat. They prevent the complaint fm extending by calling it to the surface, & by seperating the dangerous parts.—

In Carrenness & Torpor Veneris. they have been much recommended. on the supposition that they act on the genital Organs. —

Deafness of the Arthritic kind is often relieved by Synnapisms — When it is more permanent, Blisters are of more service. —

Cholera Morbus in a Majority of cases Laud: is to be used, & then Synnapisms. —

Vertigo &c Gout or Other causes is well managed by Synnapisms — For 2 years I had Vertigo, & it was only relieved by Synnapisms, & to them I owe my life — delivering daily lectures for 2 years under their Stimulus. When applied immediately to the part diseased they are precarious, & to a gentleman it translated it to the bladder. I applied a Sinnapism to the back of my neck, & had it not been removed I sh^d have died. Blisters are not so injurious as Synapisms. —

In Arthritic Strangury Blisters are used as important Remedies, & in Strangury from

Spanish flies, Synnapisms invariably relieve
This practice is peculiar to myself. —

Intermittents. They have sometimes
been given to prevent the paroxysms of Intermit=
tents, & I think them preferable to Blisters, as
we can bring their action nearer to the time
of the expected paroxysm, & the new action w^h
they excite is much greater. —

In Irregular or Retrocedent Gout Syn=
napisms applied to the Ankles have seemed to
do harm. A gentleman in this City aged 35
who had irregular gout, applied Synnapisms
to his feet, if possible to bring it there, but
they produced Vertigo, Nausea & Puking, w^h
had well nigh terminated fatally. —

In Pneumonia Dr Haller prescribed Sin=
napisms, but they are to be handled with
great care when applied to pained parts. An
infusion of the Horse Radish has been used, as
I told you. Synnapisms are Cataplasms, but
many Cataplasms are not Synnapisms, as

they may be made of meal & vinegar or Garlic

Aliacial.—

They are a natural assortment of Stimulating Articles. They are allied to Asafotida in their medical properties, but not in their Botanical affinities. It receives its name fm the Alium or Garlic. They include the Garlic, Leek, Onion &c. The Garlic & Leek are the most powerful species of this family. The whole of Garlic has nearly the same properties, but the virtues are greatest in the root or Bulb. The stimulating quality appears to depend on a volatile oil, wh may be dissipated by drying or boiling. Its Stimulating effects are evident. If Garlic be bruised & applied to the Skin, it will inflame if continued, a blister is produced, but not so quick as fm the Siliquosa; but it heals quicker.— When taken into the Stomach it Stimulates & favours digestion, but its odour passes off by perspiration. The Stimulus of Garlic is not

confined to the parts applied, but induces a Je-
bile state of the whole System, producing dry-
ness of the Faeces & great thirst. Hence it must
be improper in inflammatory Complaints. There
are few Stimulants so diffusible as Garlic. It
also acts as a diuretic. Dr Moore used the
leaf in Dropsies & Sydenham cured them
by Garlic alone. It can only be given in
Dropsies without Fever, or with Fever with the Hec-
tic type. - It pervades the minutest vessels of
the System, & soon effects it's ends when they are
worn. In cases of languid Circulation & inter-
rupted Secretions Garlic is among our best Re-
medies.

Scurvy. Dr Lind has urged the ne-
cessity of adding Garlic & Onion to the diet of Scor-
butic patients. It promotes the exhalations from
the lungs; & in Asthma, in both cases, where
expectorants are proper, it is highly beneficial,
it being a great expectorant. Garlic is useful
even when applied to the Soles of the feet. I saw
its good effects in one case accompanied with
Hydrothorax. - Its Stimulant power is shewn

by its preventing the recurrence of the Paroxysms of Intermittents To cure it, authors recommend us to begin with a clove morning & evening increasing a clove every day till the Patient is cured Bergius says he cured a case of Quartan Fever with it beginning with a clove in the morning, increasing to one more in the evening - He often mentions it as a cure for Rheumatic deafness, introducing the silk of the silk worm wet with the expressed juice of Garlic into Stimulates the Meatus Auditorius, inflames it, restores the sensibility of the part & its natural secretion. In violent Earaches it has been used. —

In Glandular diseases garlic may be employed, this I throw out as a hint. —

Of the Lithontriptic powers of Garlic. — It is employed in different forms, either by entire cloves it does not occasion so much heat - sometimes it is braised & made into Pills with flour, but as its active powers are dissipated by drying - this is not a proper mode when it is to be kept. —

Gum Resins come next

Asafotida.—

This is a Fotid concrete juice the produce of an umbilliferous plant It grows in Persia The root is cleaned from the earth & cut— the Fotid juice spues out in the form of a white liquid but on exposure to the air, becomes of a brown colour. It is of a bitter, acrid & pungent taste, volatile, & looses its vertues by keeping ℥i of the recent juice gives out a much stronger odour than ℥ss of the dried. It is a true gum resin, its smell & taste residing in the gum but more so in the resin. Asafotida is one of the most powerful of the Fotid gums & is entitled to y^e attention. Bergius used it in Common Intermittents but not in recent cases. He seldom found it important, unless combined with bark — He says he cured a 100 cases by the following prescription. —

Asafotida — ℥ij
Spt. Mindereri — ℥ij
Olium Pulegii — 10 drops. Put the Penny Royal oil & Asafotida together with a little Spt. Minder— then add the remainder, strain the medicine pour it into a vial & cork it tight — The

dose ℈i to ℈ß. — Boerhaave used it in Nervous diseases — he found it valuable in Typhus & knew its stimulating effects in this disease and many others — Asafoetida is a valuable medicine in some diseases of the Bowels, and in Dyspepsia — Being a laxative it is proper in removing the flatulent Cholicks of Hysteria & Hypochondriasis — (See Cullen) It may be used by way of Clyster as well as by the mouth —

In Epilepsy Asafoetida has been used —

In Chorea, Mania, & other similar affections it has been used by a Physician of Holland In the Spasmodic Asthma of Children. It has been used with advantage — Dr Mimner says he found no Medicine so beneficial. It is remarkable that it seldom excites nausea in Children — It has a determination to the Lungs, Acts as an Expectorant. Dr Coon & Boerhaave used it in Genuine Cynanche Trachealis in injections with Laud: In Angina Maligna Trachealis Asafoetida has been used. Dr Johnson says the Cay-

nuel of Aquills combined with Asafet: is the proper treatment. It is very different in Croup & is never an Idiopathic affection always Symptomatic. It frequently deceives us in its appearance. It is also used in the Common Hysterics Asthma, & with great advantage. Dr Monro often ordered it to be given with Opium to prevent its anodyne effect. Notwithstanding this it is endowed with a Narcotic property. Dr Whyt says it induces Sleep. —

Asafotida so generally acts as a purgative that I might treat of it seperately as a Cathartic, & it is remarkable that in Sedentary women 2 or 3 gs will purge, when their more powerful purgatives will not have their effect. 'Tis peculiarly adapted to the torpid State of the bowels in Hysteric women & old people. It sometimes salivates. —

In Caries of the Bones, it has been celebrated — ℥i of Camphor & ℥i of Asafotida, mixed together is the formula of Dr Block who mentions 4 Cases in wh it effected a cure. Snyder cured a Caries ulcer of the Metacarpal bones by this me-

dicine. In Caries fm an internal Cause it succ-
ess is more dubious - it must act by producing
exfoliation of the bone - Dr Houffler found it use-
ful in Caries proceeding fm Venereal Ulcers. It
is a substance well adapted to make experiments
on the absorption of Medicines. If you stand in an
Atmosphere of Asafotida, the faces & Urine will be
strongly impregnated with the odour. It is given
in various forms, often in the solid state, Volatile
Tinct: extract Cij water &c When we with a sud-
den or speedy effect, the watery or Spirituous So-
lution sh.d be used. I have frequently used it in
the following formula. -

℞ Asafotida -- ℥ij or ℥iij
Sac: Alb: —— ℥ij
Water —— ℥viij

Gum Ammoniac. -

This is supposed to be the produce of an Umbel-
liferous plant. It has less of the fœtid odour than
all the fœtid gums, & fm this, Cullen thinks it the
least effectual, but this is certainly a mistake

for it is known to be a good expectorant. Dr Wis-
tar used it in Hooping Cough & thinks it pre-
ferable to Asafoetida. —

Myrrh. —

A Gum Resin of a brown or reddish Colour, & de-
lightful Smell. Aromatic & bitter taste. Its Bota-
nical history is unknown. It grows in Arabia &
Ethiopia. Taken in small quantities it promotes
the appetete, & assists digestion, & is certainly an
incitant medicine. But taken in large quan-
tities it heats the whole body. It has been used
in Intermittents more generally in combina-
tion with Bark or Nutmeg. Armstrong gave
℈j every 2 or 3 hours between the paroxysms
In Angina Maligna combined with Bark
℥j every 2 or 3 hours, it has been found useful.
The Pectoral qualities of Myrrh are much spo-
ken of by British writers. In the Suppura-
tive Stage of Consumpt[n] it is used. Of its
effects in Phthisis there are a variety of Opinions.
Cullen says he found it by no means Bene-
ficial, but to do harm, given in large doses. —

In Hectic & such Complaints it has been used in Combination with Sal: Martis &c

In Ulcers of various kinds it has been much celebrated for its Balsamic & Antiseptic Qualities (Dr Cullen) It possesses the common virtues of Balt: Caper: Cullen thinks it may be useful in the Flaccidity & accompanies a Retention of the Menses. Of its use I have had no experience, but suppose it may be useful. Dr Sydenham says he has found Myrrh in combination with Iron of great advantage in Febris Alba. — Its virtues may be extracted by water or Spt Vine. —

Mezereon has been used in Syphilis by Munro & Home says it is one of the most powerful deobstruents. — It has been extensively used in Lisbon for the cure of Syphilis & given in decoction — The preparation called Lisbon diet drink is the one generally used there — ℞ Sarsaparilla — ℥ij. Guiacum ℥i Rad: Glycy: ℥i Vin Antim: 60 drops — Me

Mezereon Zij Water Cbij. This was put for
3 days in a Sand Bath at 100° of Farenheit, then
strain, & let the patient take as much as his Sto-
mach will bear, & repeat it as often as he can
without exciting any disagreeable effect. This is
one way in wch it has been used but I believe
the follow^g is the best Formula = Take of the
Root of Sarsaparilla Sliced & bruised Zij
Rasp^gs of Guiacum ——— Zi
Liquorice Root ——— Zi
Bark of Mezereon Root —— Zij
Distilled Water ——— 10 pints Mac-
erate with a gentle heat for 6 hours, then boil
it down to 5 pints adding towards the end the
bark of Mezereon Root. & strain the liquor. This is
the Formula published by Dr Donald Mun-
ro in the Physical & Literary Essays of Edinburgh.
The following has also been used by some, & partic-
ularly by Dr Monro - Of Sarsaparilla, Red
& White Sanders each Zij Mezereon Zij Ba-
lerian Zi Water Cbviij Digest for several days.
I do not think the diet drink ever cured Syphilis
by itself without a combination with Mer-

cury - Lect it has been found in Venereal Nodes arising from a thickening of the Periosteum of the bones. Mr Bell speaks in high terms of the Mezereon in Syphilis - he found it useful in those spreading ulcers wh succeed Buboes. —

In Hernia Humoralis, a decoction of Mezereon combined with Mercury has been found useful. When applied externally, it produces a Blister & a discharge of Serum. The bark of the root is to be macerated in wine & then applied. In Opthalmia the Mezereon shd be applied to the Arms near the insertion of the Deltoid Muscle, & in Habitual Opthalmia to the legs

I have now finished that great class the Incitantia - I shall next speak of those Medicines wh are more entitled to our attention as Evacuant Medicines - I shall divide them into several Classes -

Stimulantia Evacuantia.

The first class used under this head is
Errhines - They produce a discharge from
the nose, sometimes of Mucus, & sometimes of
a thinner consistence - The discharge in both
cases is from the Schneiderian Membrane. The
evacuation is often attended with sneezing.
The Stimulus often proceeds no further than
to increase the common evacuations; but
sometimes increases the general discharge for
sometime after the errhine has been left off.
They often increase the heat of the body. They
increase the afflux of the fluids in the neigh-
bouring vessels - Hence they are useful in
relieving the tooth ache. Their effects also
extend to the external Carotids & there re-
lieve the Headache. In Rheumatic Con-
gestions of the Muscles near the nose, they
have been found beneficial. Errhines act al-
together Topically at least no other effects
that when taken into the Stomach they also

produce sneezing, an effect I have often observed. This is not however the case with all Errhines. Tobacco when taken into the Stomach produces Nausea &c. They may have been useful in preventing Apoplexy & Palsy by promoting a discharge. When Apoplexy & Palsy are suspected, & their discharge ceased, it sh^d be resorted to. —

Diseases in w^h they have been used. In Hydrocephalus, Errhines have been used. Dr Percival says they are sometimes useful. Dr Patterson says precautionary considerations are necessary, for there is often a phlogistic affection of the head. I think I have seen one or 2 cases of adults where they were of advantage. —

In Epilepsy, Errhines, particularly the mercurial, have proved very advantageous, where there was a peculiar determination to the head without any Organic Affection. —

Deafness. There are cases of deafness in

wh they may be advantageously employed
Deafness proceeds fm a variety of Causes. There
is a species wh depends almost exclusively
upon an affection of the Eustachian tube, by
catching cold, wh causes a swelling of that
part wh lines the Orifice next the Fauces. It
is characterised by a noise like the boiling of
a tea Kettle. Some compare it to thunder or
high winds &c. This is always increased by
taking cold, or a full Meal. It is a very cu-
rable disease. Blisters to the Mastoid proces
has been of Service, cupping, & in one case I
found bleeding fm the arm relieve the Patient.
Purging has been resorted to. Warm covering to
the head & ears at night is extremely necessary
in such cases. Dr Sims who has best des-
cribed this says Enemas are peculiarly useful
Gutta Serena or Amaurosis. Enemas
have been used here with advantage. They
have been found useful in those cases where
it is common to bleed. In 2 Cases I have used

the Sulphth Mineral made into Snuff with advantage - Sulph Mer: 10 gr Tobacco 30 gr In both cases a Salivation was induced & continued for some time. — In one case dissection shewed a tumour in the Brain, pressing on the Optic Nerve — Mr Ware's formula was

10 gr Sulph: Mer: ℈i Pulvis Stern —

I have used the Sulph: Merc: with much advantage In one case altho' a Sclon was in the neck, I think the mere: Snuff was of much advantage independent of the Sclon. Writers say there is no contraction of the Pupil. But in one case that came under my care, the Iris was evidently contracted. When it depends upon an Organic affection of the Brain, or Syn Syphilis, Errhines will not be of any service, but in Mers I think they may be highly beneficial — Amaurosis Plethorica arising fm the suppression of Menstrual discharge, mercurial Errhines are beneficial. In Gutta Serena, arising fm Lead they

are not beneficial - Here we must use mercury. I have seen 2 cases of salivation from mercurial snuff, in one, all means for producing a salivation had before failed. If patients cannot be salivated in the usual way, I think mercurial snuff sh^d be used. Boerhaave says he found nothing of more use in the stoppage of the nose than snuffing up of warm water. —

Beet. Ancient & modern writers mention it as a Sternutatory. Galen used the juice, the Powder of the root is an Errhine. — I do not think much of it as it appears to possess but little activity

Lilly. Every part of it is an Errhine. —

Asarum Europeum, or Asarabacca.

is one of the most useful & convenient Errhines. In large doses it produces violent effects, but in 4, 5, or 6 grs it may be employed with perfect safety to produce a discharge from the nose. Asarum Europeum has been employed in Ophthalmia. It is common in America, is known

by the name of Wild Ginger. This plant I am informed has been often used by Females to produce abortion. &c. I have every reason to believe that it sometimes does. It is adapted to Toothaches &c. It is the basis of the Pulvis Sternu: of the London College. Cullen says 3ss Squill. This is considerably errhine

Poke is also an Errhine. —

Tobacco is a convenient Errhine If it be repeated once a day, it continues the discharge for days. Even in those accustomed to it. It produces some discharge, but repitition greatly diminishes the effect. When this discharge has been continued for some time, the laying it aside may produce some bad effect especially in those predisposed to Apoplexy, of a plethoric habit, & those with short necks. In whatever form Tobacco is used it exerts a Narcotic effect, & this is not perceptible only from the power of habit. Pulv: glass & Sal: Ammon: are put into snuff, so the Narcotic powers are not to be ascribed solely to the snuff

Potash is also putrin. Dr Cullen says among other effects, it produces Dyspepsia, & pains in the Stomach. Mr Lori says that the daily use of Snuff is the cause of our present increase of nervous diseases. To him we are indebted for the observation that Maniacs are very fond of snuff. altho' not addicted to it before. In Melancholia I think it prejudicial. — There has been no increase of Nervous diseases & Mr Lori's observation is not entitled to any notice Mr — has said that a snuff of Tobacco & Indian Turnip is useful in Gutta Serena. An Ointment made of the Nicotiana in the same manner as the Ung: Datura Stramon: is prepared has been found very efficacious in Indolent old Ulcers, as I was informed by a Jesuit Father in India. — The use of Tobacco in various forms dont appear unfavourable to Longevity as enquirers have shewn. —

Digitalis. — The powdered leaves are emetic, tho' not in so great a degree as Tobacco — they are nearly allied by their me-

dical & Botanical Affinities - both possesses the power of inducing intoxication. —

Of the more Acrid Errhines.

Euphorbia Officinale. It is a Gum resinous substance, obtained by an Spontaneous exudation fm a large Oriental tree. It is brot to us from Barbary, in drops of irregular shape, & pale yellow colour externally, but somewhat white within. They easily break within the fingers, by being held in the mouth they prove very acrimonious, inflaming the fauces &c. — This errhine is liable to inflame the internal surface of the Nose to a considerable degree, it extends to the adjoining parts, & sometimes to the whole of the head, attended also at the same time with a sneezing & Hemorrhage fm the nose, & shd be used very cautiously. Mr Ware found it beneficial in Gutta Serena. It is scarcely employed here. Cullen says a small dose of the Euphorbium is so active, it may increase the errhine effect of Tobacco. It is so active that the Apothecaries

are unwilling to pulverize it, & when they do, they muffle their faces to prevent its bad effects. Mr Boyle says he has seen 2 cases where a Cataract was removed by it. How it must have roused the absorbents to absorb the lens.

White Hellebore is one of the most powerful errhines we are acquainted with

Hellanium Autumnale or what is commonly known by the name of Sneezewed in Virginia. It is a very powerful & active errhine, more so than Tobacco & has the same effect on me. Its errhine quality resides in the inner row of flowers, or the disk. The leaves are also used. —

A Solution of Alb: Nitr: is also possessed of errhine qualities. In Toothache Gutta Serena, Deafness, Epilepsy, Vertigo & Incipient Cataract they are certainly beneficial, & have been too much neglected, & I think may be employed with much advantage

Sialagogues

Sialagogues.

Sialagogues are such medicines as increase the Saliva or excretion of the Salivary glands. They are External & Internal. The external, are certain acrid Substances, which when applied to the mouth, stimulate the Fauces, increasing the flow of Saliva & emptying the Salivary glands or mucous follicles. The first wch I shall mention is the

Anthemis Pyrethrum. —

The root is the part made use of & is the most important of the external Sialagogues. It when chewed excites a discharge of Saliva, it is often used for the Toothache, when powdered & applied to the nose it induces sneezing. —

Imperatic or Master Wort. —

The root is chewed wch excites a discharge of Saliva

Horse Radish. —

Cullen says that none of the external Sialagogues more effectual than this. It has been frequently employed with advantage in Odontalgia &c.

Camphor

also when taken into the

mouth excites a discharge. It is effectual in Rheumatic Toothache ——

Xanthoxylum Fraxinifolium

or Ashleaved Xanthoxylum, is one of the most powerful external Sialagogues. When the Root, Berry, or leaves, are held in the mouth or chewed. they induce a copious discharge. In toothaches & affections of the Jaws, it has been useful. The Southern Indians use it in the Venereal disease, & it is highly probable it affords relief or suspends the Symptoms. It has been found beneficial in Rheumatism, Palsy, Apoplexy & when taken internally it excites Salivation.

Polygala Seneka, is of great account.

If the root be chewed it excites heat in the Jawes & a copious discharge of Saliva. It is adapted to Rheumatism of the Jaws & toothache, & I think the action of Blisters might be greatly assisted by the Topical Stimulus of the Seneka. It has been recommended by Dr —— of Maryland in Cynanche Trachealis. he

has published a number of Cases in the N.
York Repository in wh. it appeared to have
cured, in the form of a saturated decoction.
Internal Sialagogues. 1st of
Mercury. I pass over its Natural
history. It is found Native & Mineralized with
Sulphur, in South America & Sicily. —
Pure Mercury is destitute of Acrimony, no
taste, no smell, & with respect to the Human
body, quite inert; except by its ponderosity
& weight. If we can believe writers it has
it has been lodged long in the Cavities of the
bone. Under certain circumstances when
taken into the Stomach it is certainly ab=
sorbed. At one time it was the fashion in
G: Brain to give it in its running state,
& drams of Quicksilver were taken ev=
ery morning. When Quicksilver is taken
in the quantity of an Oz it soon passes un=
changed & unfelt. Some Physicians have
given 1 or 2 ℔ as by its great weight & slip=

perineps it removes obstructions. It never does good in this way, unless the costiveness is confined to the lower bowels. The slipperi-ness of the fluid consists only in the mobility of its own part. It must be chemically or mechanically changed to render it active (See Cullen) — Vapour, Calcination, Trituration & Combined with acids. Pure Ether very agitated with distilled water gives a preparation of great power — the water is first Slate colour, then black, & kills leeches with worms &. I have no doubt it is anthelmintic & useful in dressing old Venereal Sores. —

Fumes of Cinnabar are said to be useful particularly in ulcers of the nose, fauces and throat, when other applications cannot be used Mr Hill says salivation is excited in this way in 3 hours — Would it not be proper to use Mercurial Ointment by friction at the same time — ℥ss of Cinnabar thrown on hot coals excites a salivation sooner than any other mode. —

The preparations by Triture are milder than those by Acids. but it is often uncertain in its effects. M. Plenks Mixture ℥ss of Quicksilver - Gum Arabic ℥ij well rubbed together with the addition of a spoonful of water - & ℥ss with ℥8 of water - part of the mercury remains suspended in the water & part fall to the bottom. I have employed this as a gargle with success in Venereal sore throats. The Saline preparations of Mercury gives pain. Plenks Solution is very important & it frequently does induce Salivation. The Blue pill or Mercurial pill formed of Quicksilver divided by triture with some mucilage is the most manageable. & often produces a Salivation. & is less disposed to pass off by the bowels. In long existing venereal affections it is less adapted than the other preparations, as the Sublimate & Saline preparations Even if a Salivation be excited, it is less adapted. but in recent cases it is the best. Calx

of Mercury, opium & some Aromatic oil
forms the Antivenereal pill. Quicksilver &
hogs lard, forms Mercurial Ointment; equal parts is called strong - 1 part of the former to
3 or 4 of the latter is weak. It was formerly supposed proper to add Turpentine, but now only
suet is used to give it consistence. Recollect
what I said about the union with Camph:
The french writers say the more intimate the
union the more efficacious the Ointment Sweet
oil has been proposed & is beneficial. Merc:
Ointment prepared with Hogs lard alone does
very well in winter but not so well in summer. M^r Dilone advises the trituration of
Mercury with a little rancid Oil, & afterwards to add the oil or lard ℥i of oil is sufficient to divide ℔j of Mercury - ℥i rubbed
on the skin every day will produce a Salivation in 2 or 3 days & in some constitutions
in 1 day - In myself always in 2 or 4 hours
Here I will mention a manner in which ought
to be employed, that is, very carefully rub-

bed in. It has been asserted by some that it is unnecessary to rub it in, but merely spreading merc: Ointment is useless. I have known a plaister applied in Hepatic affections for some time without effect. Mr Leaks method of preparing Merc: Ointment is by agitating ℥i with ℥i of sweet oil. & this is as expeditious & effectual as rancid Oil.

Calcination. This was formerly supposed to possess a peculiar power, it is now little used the principal preparation is the Mercurius Calcinatus. I cant see for what reason it has lost its reputation. I frequently find it very effectual internally, beginning with ⅙ gr. combined with Opium. gradually increasing the dose to ¼ or ½ gr. It has been given to the extent of 2 grs. It soon induces a Spitting. It is peculiarly adapted to old cases of Syphilis, but I believe there is more dependance to be put on the mild mercuriate

Saline preparations. — Sulphuric acid. This is a true Sulphate. It produces the general

† Eruptions

effects of other preparations The dose from 1 to
4 grs Dr Bard gave 2 grs of sulph: Merc: with 2
of Calomel — In speaking of the Enthine Medicine
I informed you it had been found useful in Gut.
ta Serena & Epilepsy. — It was formerly used
as an Alterant in Gonorrhoea without a view
to its emetic effects. When used as an Enthine
it has salivated — It vomits almost Instantaneous
with the muriatic acid we know it forms
Corros: Sublim: — It has been considered as
a sedative or hurtful medicine — I think extreme-
ly favourable of it, & is a more manageable me-
dicine than Calomel. In Syphilis, Corros: Sub:
is the best medicine — I rub it down with G:
Arabic & water, adding Opium to prevent its
running off by the bowels or puking. It must
be persevered in for when you think it has nearly
cured, by omitting it the disease returns. —

A solution of Corros: Sub: in lime water is
proper in Cutaneous diseases. Hepatic affec-
tions &c

Calomel is milder, but very apt to purge. With Nitric Acid, or the red precipitate, it forms an important preparation. Its external use is common. I have often used it internally. & with opium it is a very manageable medicine. I never begin with more than 1/4 of a gr. The Mercurius Cinereus formed by dissolving quick silver in Nitric Acid, & precipitated by Ammonia were first noticed by Black. Mercury dissolved in Acetic Acid gives us the famous pill of Keir —

Ward's Drops

℥4 Sal Liquori
℥4 ℥7 ℈1 Pure Vol: Sal Ammon:
4 Quicksilver 2 drops contain 1/2 gr. of Mercury — Dose 2 drops morning & evening. —

Citrine Ointment —

Quick Silver ℥1 dissolved in
Nitric Acid — ℥i poured hot on ℔j
of Lard, until a yellow mass is produced. It should be often prepared as it spoils by keeping. It is said to produce no salivation or pain; but in

Hepatic affections I have found it to do so.
The Ung: Citrinum is a valuable medicine in
Itch, Tenia Capitis, & Venereal Sores. In some
cases of tenia capitis, it is one of the most valua-
ble preparations of Mercury. In a case in the
Hospital last Summer, I used it with the most
striking advantage, in less than 4 weeks the pa-
tient was discharged perfectly cured. But it is
proper to observe that while he applied the Oint-
ment. he took internally the Catarmina Latifo-
lia. Mercury dissolved in the Muriatic Acid,
forms one of the most important preparations
of mercury. Tho' Professor Cullen is disposed to
think unfavourably of it. In some cases I think
it preferable as an Alterant to Calomel; when
combined with Opium, it prevents its running
off by the Bowels. In the Venereal disease of
children, it is preferable to the Merc: Dulcis.
In infants who have suffer from the imprudence
of their parents, their disease generally attacks
the eyes, Skin, & ears; in such cases, I generally

rub down the Sublimate with G: Arabic & Sugar, & add Laud: In this way it may be employed in a little milk - The dose is regulated according to the age of the child. & may be gradually increased, & notwithstanding the difficulty of salivating children, if this medicine be persisted in, it will be effected. —

Phosphate of Mercury, is thought to be a valuable preparation. It has been much recommended in Cancers, Rheumatism, inveterate stage of Syphilis & Torpid Fibre. It is said to be preferable to Ahers in Exotics, obstructions of the Lymphatic System, & affections of the Skin. It is a very active medicine & unless cautiously used is very apt to induce Ptyalism, Nausea &c

Phos: Merc —— 4 grs
Cinnamon —— 4 grs
White Sugar —— 4 ʒ divided into
8 parts, one morn & seven ng —

Mercurial Soap is said to be important in Syphilis. It consists of a Solution of Mercury in the Nitric Acid, mixed with a solution of Soap

Diseases in wh Mercury is employed

Rheumatism. Here I have but lit-
tle to say, sometimes we are obliged to have recourse
to it to cure this disease. Dr Monro has found
it useful in some cases, but it does little good
unless when Rheumatism is combined with
Syphilis. I have used it & found it useful, but
I have generally combined it with Guiacum
Never one case of Pure Rheumatism cured by Mer-
cury alone. All Rheumatic Cases, Hospital Pati-
ents are mixed with Syphilis, & here it is nec-
sary; & I give besides Mercury, Dovers powder in
the evening. When Rheumatism partakes of the
nature of an Intermittent we have little to ex-
pect frm Mercury. Chronic Rheumatism succeed-
ing to Gonorrhoea, it shd always be used. Gonor-
rhoea & Rheumatism are nearly allied. Dr
Barton mentions 2 cases in wh Gonorrhoea & Rheu-
matism alternated with each other.

Gout. Mercury has not been much used
in Gout, tho' frm its affinity to Rheumatism, it
may be successful. Dr Hamilton says he cured

inflammatory Gout in himself, by mercury combined with Opium. It was employed 70 years ago in Arthritis. –

Consumption. I have but little faith of it here, from my own experience, not because I have not employed it, but because I have never seen a cure by it. It has appeared to do good at first, but as soon as the System becomes habituated to the new impression made by the Mercury, the Patient has always grown worse. I have used every other remedy with more advantage than Mercury. The great objection to Mercury in Pulm: Consumpt^n is the great difficulty of exciting a Salivation. D^r Cheyne & Radcliffe ordered King W^m 3^d to be Salivated, & it cured him

Cynanche Maligna or Scarlatina Anginosa (for they are Synonimous) Mercury was first used here by D^r Douglass of Boston. He preferred the preparations of Calomel, & gave it with a view to its Salivating effects, for says he, vomiting, & a few Stools, will not cure the disease

Its use was indicated to him by Dr Bard who in -73 strongly recommended it as a Salivant, combined with Opium. One year after Ogden had published his paper on the beneficial effects of Mercury, I, on the authority of these practitioners used Mercury as a Purge. At times I combined Ipecac: with it to produce vomiting. With Tartrite Mineral I combined Jalap or Rheubarb. — The Baltimore Physicians use a gargle made by a strong Solution of Comm: Salt: —

Cynanche Trachealis is one of the most formidable diseases to which children are subject, Mercury is a valuable Remedy. This disease is either Idiopathic or Symptomatic - the first is easily cured but the last is very unmanageable, being a translation of Ulcerous Sore Throat or some disease. It is not Contagious & depends on the same Contagion that induces Y: Fever occurring also after Y: Fever, & particularly where fevers are prevalent. — When Mercury is given in the early stage, it often prevents its terminating fatally, but it shd always be combined with Ipecac. Some Physici-

cians give it with a view to salivate, but it is impossible to salivate under 2 years of age, & it must act as a purgative, Expectorant & Emetic. Dr Archer has employed the more acrid preparation of Corros: Sub: he gave 2 gr to ℥i of water, 2 drops every 15 or 20 Minutes. - Seneca, he also tells us is an invaluable remedy. We are indebted to the Maryland Physicians for the use of Seneka & Corros: Sub: in their Complaint. I have seen 2 cases of it in Adults, both occurring in one Family. I cured Mrs Gray by Seneka Calomel & blisters

Scrophula in some of its forms Mercury has been used. I told you Dr Coon employed it in Scrophulous Consumption Scrophula, either open or occult, owes its origin very frequently to a venereal taint. Here mercury is certainly beneficial. Where you even suppose it is not owing to a venereal taint mercury may be advantageously used, as it will go off frequently by a Salivation. The Tumours wh occur in Children, often yield to it, tho' I

am not certain it is the best remedy. When Mercury is applied to open Scrophulous Ulcers in the neck - Red precipitate is the best prepa=ration. Hillary says Mercury always increased the Symptoms, & that the preparations of Anti=mony are the best medicines Dr Monroe says it removes the eruptions at first, but after they return as bad as ever. -

Fevers. The employment of Mercury in fevers, is not a new practice. It was used in the 17th Century, in the Reign of James 1st soon after the introduction of Mercury into practice - It was gi=ven (the Corros: Sub:) to Salivate in Intermittents & Other diseases - In 1701 Wm Rowbergh employed it in Tertian fevers, he said for its purgative effects, but if it salevated, the disease was best cured. It is certainly cruel to recur to Mercury in the first stages of fevers when it can be so much more easily cured. All that it does is to break in upon the type of the disease. It is best adapted to Fe=vers assuming the Remittent Type. When the

remissions are less distinct & the exacerbations violent, a salivation often makes a remarkable & permanent impression on the disease. In more simple intermittents. I have been more sparing in the use of Mercury & proportionably more successful. In one case, complicated with bilious fever attended with Coma, I used mercury with great advantage - When the Spitting was stopped the Coma returned, & when the Spitting returned, the Coma stopt. The violent Symptoms were all at last subdued by the Mercury

Typhus. The use of Mercury here as a derivant, I have no. Experience of, but a salivation has been effectual in the hands of Other persons. I generally employ mercury in combination with Rhubarb. -

Yellow Fever. - I have little to say here of the use of Mercury. for I have lost my confidence in it. The most opposite opinions are entertained even in the W: Indies of its effects. - I have seen decided advantage from its use, & not one who was salivated died. I certainly never

& commit a Patient entirely to the use of Mercury. In some, Mercury never will Salivate, & the number is not so limited either as is generally supposed.

2ly Physicians are seldom called early, & the disease will often terminate before a Salivation is effected. —

3ly The practice is not applicable to young children

4th When excited it does not always cure. Mercury is not the best medicine adapted to the cure of Fevers, it will however sometimes cure when Bark has failed, or it will pave the way for the Bark. There are few cases of Intermittent or Remittent Fever it will yield to Mercury alone. —

Dysentery. The use of Mercury in this disease is supposed by many Physicians to be highly important. Many cases are adapted to mercury. Dr Clark used it when this disease was first introduced into Europe he gave 5 & 10 gr of Calomel every night with Opium. Their bowels were all opened with purges Tar

soon as soreness of the gums appeared, they were always relieved. The dose shd be adapted to the violence of the disease. 5 or 10 grs with Opium is a proper dose. Dr Clark preferred Calomel to any other form. Salivation shd carefully be avoided. If it dont shew its good effects in 3 or 4 days it is to be laid aside. In a Dysenteria alba, I once knot my patient was getting better fast, but it produced a Caries of the Alveolar processes of the lower jaw. Its use is extremely nice & difficult & I wish you to recollect that much caution is requisite in its exhibition. Since I have used Ipecac: I have been much more sparing in the use of Mercury. Mr Stuart died of Dysentery under the use of Mercury although it had a fair trial. It shd never be used when Dysentery is complicated with Scurvy, until the Scorbutic diathesis is removed. Mercury is very prejudicial in Scurvy. In my exhibition of it in Dysentery I gave it as a Cathartic always combining a portion of Opium with it.

x ambiguous

Diarrhoea.- In Chronic cases of Diarrhoea of sea faring men, we find it really little amended by astringents. tho' Rhino & Galls are the best. Blisters to the belly & ankles are very beneficial, & a Salivation is often effectual, kept up for some time. Its use is less dangerous in Diarrhoea than Dysentery.—

Hydrocephalus Internus.

This disease sometimes arises from the rupture of the Lymphatics of the brain, by falls. But in 99 cases out of 100, it is without any evident cause. It is always at first a Febrile disease, assuming the remitting type, & connected with fever, head ache, great sensibility to light, depression, Lassitude, Wakefulness, double vision, costiveness, discharge of worms, & at times vomiting. In the advanced Stage perfect blindness occurs, with an involuntary flow of urine & faces. This disease is often connected with Scrophula, & if the child be not scrophulous, we may trace it to the parents. In

bercles are found in the brain. It mostly occurs in Children. Out of 26 says Dr Percival the greatest number were from 2 to 5 yrs old. the next greatest number 6 to 10 yrs Dr Munro says out of 22 Hydrocephalic Patients 12 were under 7 years. I have had 25 under my own care the proportion of Males & Females were nearly equal. We frequently find a tendency to Hydrocephalus Internus about puberty particularly in Females. At that time the termination is generally favourable. Mercury was first used in this Complaint by Dr Dobson, who after failing with Emetics &c found a Salivation to effect a cure since that time it has become very common. — Very different opinions are entertained of its efficacy. That it has often done good I dont doubt, but that it has frequently failed is much more certain. I'd inculcate on yr minds the use of N.S. & blisters wch are the best remedies, & by them I have cured 7 patients.

Dr Percival says its good effects are independant of its Salivating. It is extremely difficult to excite a Salivation in Children at the age when Hydrocephalus most frequently occurs. wch is a strong objection to its use. On the nose, it excites a running, pointing out the great affinity between Mercurials & Errhines. It is said to produce a sweat of the head wch is looked on as a favourable symptom. Writers tell us we must guard against laxity of the bowels & also costiveness. Those who have been cured of this disease by mercury are said to increase astonishingly in growth. I have given it externally in the form of Ointment & internally also. But never saw it effect a cure by it. I said 9 or 10 years ago it was of no service. Mr Richards tells us that of 6 heads of Hydrocephalic Patients wch he examined, in all an effusion of Serum was found in the Ventricles. Dr Monro candidly tells us that of his 22 patients, not one

lived. & he gave Calomel by the mouth, using mercurial Ointment also 3 8 of water have been found in the Ventricles of the Brain. In many cases there is no accumulation of water, there being only blood. What good can mercury do here independent of its purging? It has been proposed to unite Mercury with Digitalis, & exhibit it in this form in Hydrocephalus. Mercury is a powerful Stimulant, & sometimes produces Mortal Hemorrhages, & the Combination with Digit: is to obviate this effect. —

Dr Johnne places his chief dependance upon mercury internally & Blisters to the Head — He has seen Merc: do much harm by producing a Slobbering of the Jaws, & I think it probable his success depended principally upon the Blisters. —

In Inflammatory Diseases.

I have already spoken of Acute Rheumatism & Inflammatory Gout. —

Peripneumonia. I had the pleasure of seeing a woman far advanced in Pregnancy relieved frm this disease by Mercury & Opium. In Pleurisy the same means are equally efficacious

Pneumonia. In this Mercury has been employed, & the Pneumonia prevailing in marshy grounds. It is well adapted to. It arises frm the same cause as Intermittents. I told you that Dr Hamilton employed Opium joined with Mercurials in all inflammatory cases - He also used it in dry Catarrhs Coughs, Pleurisies in marshy grounds & Peripneumony. I have little experience with mercury in Pneumonia. One case where Bleeding & Blisters failed, the first appearance of a discharge frm the mouth produced an alleviation of the disease, & at length cured. -

Hepatitus. This is common in Hot climates, in the E. Indies. It is always at first febrile, & seems to owe its origin to the same cause that Intermittents, Remittents & the Y Fever do. It is the consequence of Intermittent fever

fever & Dysentery. In 1793 affections of the Liver were precursors of the Y: Fever. Dogs in the East Indies are subject to true Hepatelus. In the commencem[t] of this disease is is generally treated as an inflammatory disease, every part of the Antiphlogistic plan is strictly adhered to with advantage. Mercury must be injurious until the System is reduced. However a Physician of the East Indies assured me he had used mercury with more advantage in this disease than any other except Syphilis. — Clarke says the Physicians of the E Indies prescribe mercury internally & an ointment with great advantage. In the W Indies they resort to Mercury at first without V.S. Climate may make some alteration. but not very great & the failure there is owing to the disuse of the Lancet. Mercury is prejudicial at first, in no disease is it so important (Syphilis excepted) in some stages. Its use is now completely established. In many cases as soon as the mouth is affected the disease is amended. If the respira-

tion be more difficult & the pain more acute, V.S. & Digitalis shd be used. It is used either internally or externally, but great care shd be taken to avoid profuse Salivation particularly in hot climates - As soon as Salivation appears it shd be desisted Qm Mercury is here most important. The Cough wh often attends is astonishingly relieved as soon as Salivation commences, just as if the System could not bear the 2 irritations at the same time. You must not be discouraged at having to repeat the Salivation twice in the same person, for the symptoms sometimes entirely disappear & return again. —

Goitre or Bronchocele. Varies Qm the same cause as Intermittents. Many remedies are recommended here Dr Speer advises the mercurial pill; It certainly sometimes yields to Mercury. Dr Wallace cured this disease by using Mercury till it salivated. Mr Saunders says a mercurial course seemed to

check the progress of the disease. Neither cures itself. or some disease attacking the constitution cures it. Malignt Y. Fever cured one case. the Mercurial plan in his last case had not been pursued. —

Dropsies. — House here is not modern Dubermi used it 110 years ago. he gave it to raise salivation, & succeeded in many cases of Abdominal Dropsy after the patients had been tapped: Calomel has been used with success combined with some of the Diuretics. in obstructions of the Viscera, but principally with the squill Dr James cured above 40 patients of Dropsy with Calomel Pills every other night, the day between the nights of giving the pills he always gave a purge. I generally combine it with Turpith Mineral. Lind speaks of its efficacy. In the E. Indies writers say it is peculiarly injurious. the quantity of the water increases after Salivation, but when the mouth heals the swelling returns, & the quantity of water is decreased.

All dropsies are not to be cured by Mercury. Those arising fm Intermittent & Remittent fevers & fm visceral obstructions, in such mercury is peculiarly adapted. In febrile Dropsies after the Diathesis is reduced by the lancet & Squills, mercury is the proper Remedy to complete the cure. Mercury is also adapted to Anasarca more than to Ascites. That it sometimes fails, & afterwards yields to other remedies is certain. - It is a powerful promoter of Absorption, but leaves the System much debilitated, & anasarcous Swellings are often the Consequence of a Salivation. It has done good, & is often prejudicial. I have seen some light cases of Hydrocephl: Intern: rendered worse by it. —

Jaundice. - Jaundice is generally more successfully treated by warm baths, Emetics & Opium. Dr Clarke says many cases wh refuse to yield to other medicines, he found yielded to this. Dr Monro also adds his testimony. I have little experience of Merc: in this disease

xcept that I make it a practice of giving
Mercurial Purges

Epilepsy. Mercury & its preparations have been given to excite a Salivation, & we hear it has suspended the disease & moderated the paroxysms. It is more adapted to those cases accompanied with a plethoric state of the system. Cinnabar has been much recommended, one writer calls it the magnet of Epilepsy. Dr Dover combined Calomel with Valerian. Effusions of bloody serum in the Ventricles of the brain are shown by dissection, & as Mercury promotes absorption, it is said to be beneficial. I have used it, & never made a cure, altho' all were Salivated — Blisters Purges & low diet were found more efficacious. —

Tetanus. Of this there are 2 Species, Idiopathic & Symptomatic. The first often admits of a cure, but the latter arising from lesions of the Nerves, or bites from Animals is rare-

by cured. The first has been cured by fric-
tions, cold bath, Bark & Wine. Dr Clark says
mercury in his hands was the best remedy, but
he candidly says he never cured one case of Symp-
tomatic Tetanus. He however gave Mercury to
prevent its formation, using it externally & inter-
nally. 2 or 3 grs of Calomel a day. After Capital
operations & wounds he always adopted this plan,
I think it highly probable it was successful. I
have seen a decided case of threatening Tetanus
prevented by Mercury. In this case I gave Ca-
lomel, & as soon as it affected the mouth, the ri-
gidity of the Jaw immediately ceased. —

Hydrophobia. If we were to believe
what Physicians tell us we sh^d infer that mer-
cury has cured this disease more than 200
times. But in those cases immediately after
the bite of the Rabid Animal, mercury is used
externally & internally, the Patient does not
take the disease, it is then concluded that mer-
cury cured the disease. I don't doubt but it

has prevented it. It possibly cured some light cases. There is great difficulty to bring on a salivation, if it could be done the disease might probably be cured. This disease seldom takes place before 30 & sometimes 90 days after the bite of the Rabid Animal; during this time the system is not disturbed, neither can the Patient be made to believe that the animal was not rabid. In such cases there is no difficulty to excite a salivation. The chance of preventing Hydrophobia is greater than in Tetanus. for in the last the interval is so short as to preclude salivation. wh is not the case in the former. At what time shd the use of Mercury be commenced? I think immediately after the bite, but it is not necessary to bring on a salivation till a few days previous to the earliest period at wh the disease has been known to come on. —

Bites of Poisonous Serpents. —

Mercury has been used here & in some diseases it seems to perform the part of an Anti-Spasmodic

Dr Home gave it in a difficulty of Swallowing

Yaws or Frambesia.

In this affection Mercury has been used with great benefit by some. Dr Hellary who thot it improper in Scrophula thinks it one of the most valuable remedies in this disease, he directs it to be given 5 or 6 grs a day until a moderate Salivation is induced. He prefers Calomel, less the unctuous matter shd carry the morbid matter into the Skin. Bancroft informs us after inuptions & Suppuration has taken place, it may be cured with mercury combined with Camphor. this effect may be obtained at any stage of the disease. In a case wh came under my care, I used mercury externally to the inuptions, & at the same time gave it internally, till it salivated & thereby relieved him. In S. Carolina, Mercury has been employed with advantage. Dr Tucker says he found it efficacious. The London Physicians say it cures the first ulcers, but trans=

lates it to the bones. I saw one case of Hepatitus in wh the mercury produced curved spine

Lepra. Here I can say but little having never seen but 2 or 3 cases. But for its affinity to many other diseases in wh mercury is beneficial, I dont doubt it has been used with advantage. There are many different opinions Savage combined it with Hillary says it abates the disease for a little time but after agravates it. I add the preparations of Antimony are the best. Dr Dolland Monro also agrees with Dr Hillary in opinion. The preparations of Mercury I shd use wd be the Red Precipitate internally, & Calomel combined with Camphr externally, as Bancroft used it. — Lepra & Syphilis are an unit & the same according to Hensler; wh I believe

Sybins. — This bears a strong affinity to Syphilis & is nearly allied to Lepra & Yaws Appears Epidemic in Canada. Mercury has been found efficacious

Amaurosis. When it owes its origin to Syphilis, it is called the Amaurosis Venerea. It is more commonly so than is supposed. Hence appeared a few hours after an illicit connection. To this species mercury is best adapted. Dr Smith tells of a Gutta Serena which was cured by Mercury, but the patient afterwards saw double. The Corros: Sub: has been peculiarly employed in this disease. It sometimes produces a translation of the disease

Deafness. Mercury is adapted to many cases of deafness. It frequently occurs in Epilepsy, & at times owes its origin to effects on the brain, & here there have been many instances of Cures. The following striking case is related by Dr Gordon. A Soldier who after bathing in the Sea became deaf, had a hissing noise in his ear, & Mr Gordon after using the usual remedies for 3 Mos without success, at length had recourse to Mercury & cured him. The morning on w^h the Mouth became

† Dyspepsia

affected. that same day his hearing Returned.

Colica Pictonum. In this D^r Clark used Calomel in 15 or 20 gr^s. & it is said it never failed to open the bowels without a Salivation M^r Clutterbuck has given us a favourable testimony of Calomel in this disease. he gave it to Salivate.

Mania. I can give you no assurances of its effects in Mania, I mean as to a cure. Mercurial Purges are beneficial. —

Hypochondriasis & Hysteria. In some cases mercury used so as to excite Salivation has been found beneficial. In Hypochondriasis I gave the Blue pill, one night & morning containing 1 gr with advantage, inducing a mild Salivation by it. —

Cancerous Affections. I have but little experience here, but many testimonies exist in its favour. Sanson cured a cancer of the nose — he says he learnt it of Hutch a Russian. he used the Oxymuriate of Mercury dissolved in Ard^t Apt^s Richard cured a cancer of the upper lip — Gooch cured one of the mouth

Van Swieten one of the Tongue, & Rowley one
of the nose. The Corros: Sub: is the most com-
mon preparation employed. But you are
not to suppose that the universal opinion of
Physicians is, that mercury is proper in Can-
cer, but on the contrary many Physicians sup-
port a contrary opinion. Dr Adams says the
only cases are after an operation, where there
are unhealthy granulations, & if there be a
callous edge or basis, mercury has no power
till they are extirpated by means of the Knife
or Caustic. Dr Meade says he found it im-
proper in genuine Cancer, but in sores that
looked like Cancer, it was one of the most va-
luable remedies. I am informed that a Phy-
sician in Chester County has cured many
cases of Cancer by means of Muriate of Mer-
cury. Merc: Sulph has been highly recom-
mended in Gutta Serena. Dr Smith lately cu-
red a case by Oxymuriate of Mercury

℞ Oxymuriate Merc: — gr ij
Vet Ether ——— ℥ ij
Aqua ——— — ℥ x of Sulphur the

the patient took a tablespoonful. After he had taken 10 grs of the Sublim: he was able to read

I have used it externally & internally in several cancerous like sores. On Camphor. I told you I cured a cancerous Scrotum by Merc: Ointmt. I told you the Red Precip: was the best preparation. & it has often been very beneficial

Gonorhoa. I seldom give it internally, but mercurial purges often exert a surprizing effect without inducing Salivation. It must irritate the absorbents into greater action to take up the virus fm the urethra. The matter of Chancre & Gonorhoa is I think specifically different. We sometimes use mercurial injections in Gonorhoa besides the Astringent, but I have now laid it aside At times I have employed a very weak solution of Corros: Sub: particularly in lime water or suspended in G: Arabic. —

Rub down 8 to 12 grs Calomel
2 ℥ G Arabic
℥ 10 Water
M. 1 1/2 to 2 grs Opium —
1 Syringe full 5 to 6 times in 24 hours. I add the Opium only in Chordee. In some cases, such an injection is necessary, as when there is a running connected with an ulcer of the internal surface of the Urethra Here Mercurial injections are absolutely necessary —

Cutaneous Diseases where the General Constitution is little or none affected. —

Itch. Many medicines have been used, but none are so valuable in the cure of Itch as the Mercurial preparations. Mercurial Ointment is not so good as the Citrine Ointm^t — it is less filthy. Muriate of Mercury. 6 or 8 grs to ℥j of water is often one of our best remedies. Mercury & Antimonials have been found more

valuable than either alone

Tenia Capitis. The preparations generally used are solutions of Corros: Sublim: in lime water, or Mercurium Hydrarginum — The last the (Ung^t. Citrinum) is the most valuable & I have used it with decided advantage I always use it in obtinate cases & can recommend it to you. When internally given, I rub down the leaf of Virginia Ivy with a portion of Nitre & G: Arabic — It produces acceleration of the pulse & itching of the Head. —

Pleuritis This is brot on by coming in contact with the Rhus Radicans — This disease consists of small vesicles filled with Serum of a watery appearance accompanied with an itching & generally with an affection of the Scrotum in 19 cases out of 20. The secondary effect of this article is on the Scrotum. Women are affected about the Pudenda — Mercury is the sovereign never failing remedy in this disease. I had this disease in 1797 & was cured by a Solution of G

qs of Borax: Sublim: to 12 Oz of lime water
It is necessary to make this solution stronger, af-
ter, a few applications the disease begins to sub-
side in 5 or 6 days it goes off by desquamation
It not only cures the disease, but renders the sys-
tem less susceptible of future attacks - The Ca.
shaw nut produces the same effects, & is cured in
the same way. —

Formicatio. - In this disease there is no
medicine so effectual as mercury, in some of its
forms It is generally accompanied by an itching
& pricking like the bite of Ants. In some cases
it is a true arthritic affection & rarely occurs but
in Arthritic habits. It is generally confined to
the legs face or Arms, or some other part not im-
mediately necessary to life, & if removed from these
parts, it may bring on an attack of the Gout
in some other part more valuable. I therefore
think it shd not be cured, for it may suspend
Epilepsy, Paralysis, or some other disease, or if
it is cured, depletion Purging &c shd be used at

the same time that mercury is applied exter=
nally. The follow^g case came under my no=
tice. A Gent: had this complaint in his arms
forehead, legs &c. He rubbed a few times with a
weak solution of Corros: Sub: not more than
1/4 gr. & the disease disappeared. Tho' in the mean
time he was purged, & no inconvenience occured.
I have seen 2 cases where Mercury proved the
Sovereign remedy. But if not removed very
gradually I suspect it must be highly injuri=
ous to the Constitution. —

Modus Operandi. — To what par=
ticular quality in Mercury does its salivant ef=
fects belong? Some say by the Oxygen it con=
tains, but this scarcely needs a refutation. I am
disposed to think differently for the follow^g reasons

1st If salivation was induced by the Oxygen
it contains, in inhalation of Oxygen gas wd in=
duce it in all cases, wch is not the case. But
we find salivation induced in all cases where
it is obtained by Mercury. —

2° Admitting this supposition to be cor=
rect, who will imagine that a salivation is

brought about by the small quantity of Oxy=
gen contained in a quantity of mercury suffi=
cient to Salivate.

3° Mercury is not the only Medicine that will Salivate, the same effect is produced by Hemlock Camphor, Opium & many other plants, & by the flesh of certain fish, & this we ascribe it to Oxygen in these. Another circumstance to prove it is not occassioned by Oxygen, is that in Scurvy the gums are tender & put on the exact appearance of a Salivation, & this disease is supposed to depend on a deficiency of Oxygen, & this conjecture is highly probable for the Citric Acid being so valuable a remedy in this disease — 2d Salivation has been induced by Copper coin, tho' it is dissolved by the Gastric Juice. 3° Salivation not unfrequently occurs in Pregnancy & is probably owing to mechanical pressure. —

The different opinions concerning the operation of Mercury may be reduced to 6 heads.

I.st Those who think that it acts mechanically by its supposition on its ponderosity

IIdly The second opinion is that it acts as an universal evacuent. —

IIIdly The Chymical Philosophers supposed it mixed with the blood, thereby uniting with the Venereal poison, forming a Neutral Salt. —

IVth Opinion is that it creates a new disease wch counteracts the Venereal disease, or Cyncirita-ting the part already irritated by the Venereal poison, thereby destroying the excitent wch is no longer susceptible of being irritated by the Venereal poison. Mercury is not the only medicine that cures venereal sores. Chancres have been cured by Nerdigrese, sulphate of Copper, & Alum, acting in the same manner that mercury does. In warm countries the Venereal disease is cured by Sudorifics. Carbonate of Ammonia has succeeded with Perrin, but I think no venereal disease can be cured unless the Mercurial fever is induced. — The Fever induced by mercury is of a peculiar kind, called Morbus Mercurialis, however violent it is unattended with

perspiration. It is unquestionably a Fever of the inflammatory kind, & accordingly we are obliged to bleed patients labouring under it. Sometimes the blood drawn throws up a buffy coat tho' not always. Mercury is not the only salivating medicine with wch we are acquainted. It is sometimes induced by preparations of Copper — The Cuprum Ammon: as I before told you has this effect — Preparations of Antimony likewise produce Salivation, but the teeth does not become loose neither is the breath of the patient affected. — I proceed in the next place to treat of the 3° Class of Stimulantia Evacuantia, & these are

Emetics. —

By Emetics I mean such substances as excite the action of Vomiting & bring up the contents of the Stomach. This is an important assortment of Medicines. Emetics were among the earliest medicines employed in practice

Where ever there were Societies of men Eme-
tics must have been used, as their employ-
ment must be naturally suggested by seval-
lowing pernicious Articles. We find the Sava-
ges to possess considerable knowledge of these Ar-
ticles, & the Indians of America were acquainted
with many important articles of this class
before the Arrival of the Europeans. The most
important vegetable Emetics we possess, just
such an as Sydenham desired, were made
known to the Europeans by the Brazilians,
who had long employed it. The six nations
of Indians are acquainted with no less than
15 or 16 different Emetics, all of wh are Veget-
able except one, viz the Sulphate of Iron. —
Nature herself clearly solicits us to use
them by inducing spontaneous Vomitings, &
by their profuse distribution. The Practice of
Medicine without their employment wd be
feble indeed. Vomiting is a Function Natu-
ral to Man & other Animals — Birds vomit

up feathers & hairs w^h the gastric juice is unable to dispolue. The Horse however cannot be made to vomit. This is owing to the peculiarity of the Structure of his Stomach, or in other words for the Sphincters round the Cordiac are so powerful as to counteract the contraction of the Stomach, or in other words, the Sphincters of the Cordiac are Stronger & more powerful — As the Stomach of the Animal is thrown into sympathy by the action of an Emetic, & the Stomach contracts, but its muscularity being less potent than the Sphincters of the Cordiac, its contents must be retained. It has been a question much agitated, what is the real action of the Stomach under the operation of an Emetic. Cheyne supposes it to be quiescent, and that as much do as a Clyster pipe in a Bladder. This is going too far, but I believe it is less concerned than the Abdominal Muscles & Diaphragm, & more quiescent than is generally supposed.

We shall first speak of their general

use - Secondly of their use in diseases. & Thirdly of particular Emetics. -

Effects of Emetics in General. They are well adapted to many morbid states of the Stomach, but in health are pernicious (see Cullen) An unusual quantity of mucus in the Stomach may often render vomits necessary. The first effects of Emetics in general are to evacuate the stomach alone, the second, when full vomiting is induced, the Jejunum & Duodenum In many Animals the bile is naturally passed into the Stomach without ever entering into the Duodenum. Dr Cullen supposes there is a Consent between the Stomach & the Skin, thus producing perspiration. —

After the Emetic is swallowed, the Stomach as soon as it gets over the disgust becomes quiet Nausea, rigors, body agitated the pulse quick and strong. & sweat breaks out. Squills produce a copious flow of urine when taken as an Emetic. — Emetics may be so managed as to prove Diapho-

retic particularly Ipecac: & the preparations of Antimony. more of this hereafter. All Emetics do not prove Diaphoretic as the Digitalis Purpurea & Squills, &c. is one objection to Dr Cullens opinion of their acting by consent with the Skin. Dr Hunter supposes that there is a Sympathy between the Testicle & the Stomach. — Some persons are of Opinion that Emetics contain qualities noxious & deleterious to the human body, but if this is the case, how can we accept for warm water proving Emetic, a fluid we know. &c contain nothing deleterious. Upon the whole says Dr Barton, I think the Opinion that all Emetics contain something deleterious is founded in truth, warm water excepted Dr Bryant Robinson says Emetics produce Astringent effects on the extreme vessels every where corrugating & stopping the mouths of the small Arteries & veins when Bleeding, for this reason, he gave them liberally in Hemoptysis. Dr Jn° Hunter thot that vomit 9

increased

increased the action not only of the absorbents but of all the vessels of the System. for wh reason he prescribed Emetics in Hernia Humoralis. - In 20 30, or 60 Minutes after the exhibition of an Emetic, a peculiar nausea comes on attended with pain in the head. The Nausea is most probably occasioned by the application of the matter of Emetics to the sentient Nerves of the Stomach, slight rigors occur, the pulse becomes low & slow, the eyes lose their lustre, & dejection takes place. During vomiting, there is great action of the Muscles of respiration, the veins swell & grow turgid, & the Countenance before pale, now becomes floid. After having vomited 3 or 4 times, the sickness goes off for a short time, but soon returns again, Perspiration becomes copious. Different Emetics produce different effects for instance Antim: Tart: & Squills. The effects of Emetics are correctly described by Dr Moore, to whose work I refer you. See also Cullens Mat: Med: Some

are of opinion that the action of vomiting is conducive to Health. & that altho' we are perfectly well, we ought occasionally to take an Emetic This is absurd in the highest degree. A man in health cannot render himself better by Emetics, or by medicines of any kind. Dr Cullen very justly observes that the too frequent use of Emetics is pernicious. —

Diseases in wh Emetics are employed

Fevers. Many Physicians always precede the Bark in Intermittent fevers by Emetics. This as a general rule is improper. They are best adapted to Febrile diseases of Hot Climates. When there is a Torpor of the whole body & particularly of the Stomach. they may be proper previous to the exhibition of the bark in Intermittents. I refer you to Jn° Fordyce's dissertation on fever. It is a much contested point amongst medical men whether vomits are safe where the blood is much determined

to the head. According to Sydenham they are safe while V.S. is prescribed - perhaps as a general rule they are unsafe in such cases they have however been warmly recommended

Epilepsy. Richter was fond of giving them here just before the expected paroxysm I have used them, & find them rather beneficial. - In Fothergill says Apoplexy is a symptomatic affection of the Stomach very often, there Emetics are the proper remedies

Hydrocephalus Internus is generally the Consequence of Remittent & Intermittent fevers, much more so than Inflammations of the Lymphatics, & there I think they may be useful. -

Rheumatism. They are beneficial here they empty the Stomach, depress the pulse, produce a Diaphoresis & often determine downward producing all the effects of Cathartics. -

Gout. They have been useful in some of the regular forms of Gout, alleviating the pain &c - but I think they are peculiarly adapted to the

Irregular Form - when it attacks the Head, vomits have often succeeded in bringing it back to the Feet. I have remarked the same effects from N.S. but by no means so generally, & from voluntary or excited vomiting. —

Ophthalmia. Emetics have been found useful & Dawson ascribes great efficacy to them. —

Sick Headache to which women are subject to, Emetics are our best remedies, but I never use Antimonial Emetics, always employing Ipecac: & afterwards a strong cup of Coffee. —

Tardy Eruption of S. Pox. At times the Eruptions appear, immediately after the operation of an Emetic

Chronic Hoarseness succeeding Measles. Emetics are highly beneficial. In treating of All: Vitis: I told you I gave it 2 or 3 times to excite Nausea & sometimes vomiting, following the practice of Saunders. —

In Dysentery & Diarrhoea they have been useful. —

Diabetes. — Here are cases in which Emetics

are among our best remedies. The sweating preparation of Dovers powder has been useful, the principal ingredient Ant. is an Emetic, so they promise much from their Diaphoretic properties. —

Dropsy. Emetics are well adapted to some cases. Some suppose the Squill is more advantageous when it excites Vomiting. —

Jaundice. Emetics are warmly recommended here, particularly in those cases depending on Stones in the biliary ducts. D. Home found that the Patient discharged the Stones much better, if the Emetic was given while they were in the warm bath. —

Consumpt.n They are much recommended here I myself have given them with advantage

Cynanche Trachealis. I have employed emetics with success in this disease. V.S. Blister, &c is the Common practice with Calomel. Ipecac: is better than Antimonials being less debilitating

Cynanche Maligna. My favourite remedy is Sulph: Merc! tho' sometimes Ipecacuanha & Calomel. —

Asthma. Here Emetics are highly prized by some, particularly Ipecac. —

In Mania they are sometimes useful

Puerperile Fever. Dr Dubly recommends Emetics here. & it has been imitated by Emetics Physicians of this City, who placed their chief dependance on them — given to Nauseate & generally bleed & more. —

In Hypochondriasis & Dyspepsia Emetics are some of our best Remedies. —

Hiccough. A noblemans wife was once cured of this Complaint by Emetics. —

Hemorhages of Red Blood. In no disease have Emetics been used with more advantage than in these. Dr Robertson recommended frequent vomiting in Hemorhages. & upon Dr Cullen tried it with advantage in some cases; but in one case it increased the Hemor-

shage The fear of meeting with similar cases prevented me from prescribing Emetics. Dr Cullen thinks that during the operation of an Emetic, a constriction takes place upon the mouths of the bleeding vessels. — Bilogavin thinks Emetics one of the principal Remedies in Dysentery & other Hemorrhages. Sydenham recommends riding on Horseback, & it acts by Nausea.

Menorrhagia. Mr Dobbeid gave 1/3 or 1/4 gr. of Ipecac: with a little sugar every 2 or 3 hours, & as soon as Nausea is produced the hemorrhage abates. He observed a Patient shd never take it on an Empty Stomach, otherwise it will induce vomiting & destroy the intention of it. —

In Bloody Urine Dolley found Ipecac: most serviceable. —

Uterine Hemorrhages. I have had great success with Ipecac: in these hemorrhages, & always as soon as Nausea began the hemorrhage abated. I am surprised this mode of stopping hemorrhages was not sooner resorted to

p.

for nature seems to have demanded it. May not the Nausea wch accompanies Pregnancy be an intention of Nature to prevent Uterine Hemorrhage. No practice is more successful than that of giving small nauseating doses of Emetics. Large doses are not necessary, except lead — Ipecac: in union with Acetate of Lead is very beneficial for 2 grs of Ipecac: every 2 or 3 hours is excellent. I have cured several cases of Uterine Hemorrhages by 3 or 4 grs of Ipecac: thrice a day. We have passed the age of allowing Specifics, but something like it must be admitted to Ipecac:

I confess I am at a loss to explain the mode of operation of Ipecac: It cannot be from its astringency; for the small doses that are used & if this was the case all astringents ought to have the same effect, wch is not the case. —

Murray thinks it acts by its anti spasmodic quality. I am persuaded it does not act by its Diaphoretic power. Because any thing that wd produce a perspiration wd have the

same effect, wh^n is not the case. — The follow-
case may throw some light upon this subject —
A Lady of very delicate habit was siezed with
a flooding. I prepared 2 powders of Ipecac &
Opium ā containing 12 gr^s of each. If the first
did not have the effect. She was to take the other
in ½ an hour. When she took the first, she was
very ill, but in ½ an hour after was so much
relieved, that it was unnecessary to give her the
second. It did not produce perspiration but
sickness. Emetics then act by creating a new ac-
tion, or transferring the action from the uterus to the
Stomach. Large Blisters applied to the Ankles &
kept on for some time act in the same way. They
have been much recommended. But I dont
think them as effectual as Ipecac: The cure cer-
tainly depends much upon its producing nau-
sea, because I have always found the effects of
lead much increased by the Ipecac: On the
whole, next to the preparations of lead, Ipecac: in
small Nauseating doses, constitutes one of our
best remedies in Uterine Hemorrhages, Even
the virtues of the Lead are enhanced by Opium

Nature herself seems to have invited us to pursue this practice, for the often causes Nausea & vomiting to check such Hemorrhages.—

Hernia Humoralis. Strong vomits have been found beneficial here. They act by debilitating, as they certainly have some effect in reducing the Force & frequency of the pulse— But this reduction is much easier effected by V.S. & other depleting remedies. Mr Hunter's Theory of the sympathy between the Testicle & Stomach, led him to prescribe them in this disease. I have laid this practice aside.—

Incarcerated Hernia. Emetics are much recommended. The Spasmodic affection was subdued by the relaxation. They dont act generally as Anthelmintics but when Round worms are lodged in the Stomach & Oesphagus. They are good In Georgia they are used to dislodge the Hernia.—

Abscess of the Throat. Emetics often prove useful by causing them to break.—

Bites of Venomous Serpents. Emetics were recommended 100 years ago by Springle in venemous bites.——

Individual Emetics.

Emetics belong exclusively to the Vegetable & Mineral kingdoms. The Animal kingdom affording not one. Altho' the Flesh of the Wild Pidgeon that has fed upon poke or laurel berries proves Emetic; as does also the flesh of some Species of Fish; but all Emetics employed in practice are derived either fm 1st the Mineral or 2d the Vegetable kingdom Dr Duncan arranged Emetics as follows

1st Emetica Irritantia, as Turpith Mineral &c
2 —— Evacuantia, as Ipecac: & Squills
3 —— Callida, as Mustard Horseradish &c
4" —— Narcotica: as Tobacco & Foxglove —

but I doubt very much whether they produce their effect by virtue of their Narcotic power. I am not contented with this Arrangemt. He calls one Class Evacuantia. I would ask don't all Emetics evacuate. Another Irritantia & they all irritate more or less.

Stearn — has arranged them as follows —

1st Emetica Relaxantia to wh belongs warm water &c

2d Emetica Resolventia to resolve the Fluids as
he supposed, as Tart: Emet: & Other prepara
rations of Antimony, & Squills —
3d Emetica Callida as Ipecac &c
4th —— Drastica as White Vitriol Tobacco
&c I shall divide them into 1st Vegetable
2 Mineral & shall begin with the

Vegetable Emetics. —

Asarum Europeum.

It was fre-
quently employed by the older Physicians. Lin-
nous thot it a substitute for the Ipecac: but it is
greatly inferior. — The leaves & root are the parts
used, but the root is the most powerful. The
dose is ℈i Cullen thot it might answer as a
gentle Emetic in the dose of ℈i & suited to many
of the purposes of Ipecac: — It has been much used
in Intermittents & Hooping Cough. The Asarum
is common every where in the U States & is cal-
led Colds foot in our Markets
The American Asarum or wild Ginger, possess-
es the same properties. —

Seneca Vulgaris

Senecka Vulgaris or Groundsell.

Her plant is more acrid than has been generally supposed. The Highlanders of Scotland were accustomed to employ it as an Emetic applied externally to the Stomach in the form of Cataplasms. It has been externally applied in the cure of Intermittents. A strong Solution proves Emetic. Rhea used it internally with advantage: he informs us that the expressed juice is an excellent remedy for Horses affected with Botts. Stedman found it applied externally cold, to stop Ague.

Nicotiana or Tobacco. The Cul-

len dont think it valuable. Dr Stedman used it internally - he found 6 grs of Rappee or Scotch snuff as effectual as 2 grs of Tart: Emet: upon the Stomach of the Hottentots. When externally applied to produce Vomiting, the Leaves are beaten, made into a poultice with Vinegar or Brandy, put into a Bag & applied over the Epigastric region. I know says Stedman, 2 Cases of enlarged Hypochondriac regions cured by it, the matter thrown up was great in both. The quantity

of Tobacco composing the poultice &c be in
proportion to the Strength of the Patient. In the
man, one of the cases just mentioned there was
℥6 ß to the boy ℥j The follow[g] fact shows the
activity of Tobacco, when applied to the head,
for curing the Itch, it frequently produces vom-
iting of blood. Our plant is highly useful in
those cases where an Overdose of Opium has been
swallowed, applied in the form of a decoction
of the leaves to the Stomach, vomiting was brót
on & the patient saved. — Case where ℥j Laud:
had been taken into the Stomach — ℥ of Alb:
Vil[g] was given with very little effect. Catap-
lasms of Tobacco & Vinegar were then applied
& in 20 minutes, the Patient moved his hand
to the spot where they were applied & began to
vomit, he vomited for 6 or 7 hours & was saved

Tinea Capitis. Tobacco applied to
the head produces sickness & vomiting. Ap-
plied to a lacerated thigh, it produced vio-
lent vomiting — It may be useful in remo-
ving obstructions, hard indolent Tumours
&c. ——

Ipecacuanha.

This is by far the most important of the Emetic medicines. It came into practice directly after the time of Sydenham, & is the article he so much wished for. Altho' long known, the precise plant from wch their inestimable medicine is obtained was but lately discovered. It is obtained from the root of a Brazil plant called Calicoca Ipecacuanha. The Emetic resides in the bark of the root principally, tho' the wood contains great Emetic properties. In the Bark we discover resinous particles wch are not easily seen in the wood. The Medulary part of plants never contain the same quality as the other parts Ipecac: is certainly one of the most valuable Emetics, tho' it dont give a very powerful or permanent Stimulus to the Stomach. & on this acct is not by some to be less efficacious than 1 or 2 others. Cullen says that when it is proposed to promote a moderate evacuation only, Ipecac: may be used with more safety than any other. It is one of the most certain Emetics, even in

has induced vomiting in some Constitutions & 2ss will very frequently prove Emetic if it be good & sound. When the Ipecac is good 6 grs will operate as effectually as Dij - From 5 or 6 to 10 grs of the Ipecac & The Dose is the dose, tho' more may be given with safety, as it is generally known out on the first vomiting - The follow- is the Formula for Ipecac: Wine. -

℞ Of the Root bruised. — ℥ij
Spanish White Wine ℔ij - Digest for 10 days & then Strain Dose ℥i more or less accor- ding to the Strength of the Patient. -

Another

℞ Root of Ipecac: — ℥i
Sp: White Wine — ℥xv Macerate for 3 days & then filter for use — Dose ℥i. —

It is employed either in this State or Powder - whether wine or in powder, it certainly proves Emetic. A great deal has been said about a proper quantity for a dose. It was formerly gi- ven from ℈i to ℥i but this is found useless & improper Mr Murray thinks the Combina-

tion of Tart: Emet: necessary. & I recommend this practice myself. M^r _ thinks 6 gr^s are efficacious as Dj Dr Pye's dose was generally 5 gr^s & as we get it. it seldom shews its efficacy under 5 gr^s Cullen says it is seldom to be depended on under 10 gr^s & then not unless warm water is taken plentifully. But it has done much good in much less doses. The British Practitioners generally combine it with Tart: Emet: 10 gr^s their Average dose. I have never exceeded 15 gr^s Ipecac: is often adulterated with a variety of plants. _ It has great effects in lessening the operation of Opium, & it is the best remedy we can employ when a too great quantity has been swallowed _ It acts as an Antidote to the opium, & is as certain in its Operation as any we can employ. _

In Hemorrhages Ipecac has done more good than any other medicine except lead, & the effects of lead are greatly enhanced by the addition of Ipecac! It is peculiarly useful in stop-

1 Nausia

ping Uterine Hemorrhages & indeed in all Hemorrhages. Bergius found it useful in Uterine Hemorrhagies only given just before the fit comes on. —

In Intermittents it has been much celebrated. Dr Thomson gave it at the time of accession, & found it better than Antimonials — It is given to vomit once or twice just before the accession of the fit. Richter employed it in the cure of Intermittents, & I have done the same. +

In Pulm: Consumpt^n — it has been found beneficial in small doses to keep up a slight [redacted]. I generally give the powder of Ipecac Combined with Creta —

℞ — Ipecac — grs ij to 2ß
Creta ——— grs iv or vj ℈ exhibited 3 or 4 times in 24 hours with a view to promote slight nausea. I have cured 2 cases of Vomica completely by this plan. —

In Asthma Spasmodica it has been used with success as a Nauseant. Dr Akenside says in Asthma Humorale, or in cases that render

vomits necessary, he found nothing so valuable as Ipecac:- When I found the Patient in a severe Paroxysm I gave him 3ij et afforded immediate relief; in other cases 4 or 5 gr. every morning. He use says the D^r dont depend on its vomiting, but seems to be owing to its Spasmodic power. It is worth mentioning, altho' Ipecac: thus relieves Asthma, it induces it in some by its smell alone of this I have seen an instance in one of my Pupils

In Confluent S. Pox where the Patient seemed to be almost suffocated, I have given 3ij with great advantage, & repeatedly with success for the loads of Phlegm brot up by it.- D^r Cullen supposes Emetics act by determining to the Skin

In Dropsy, & particularly in the Anasarcous, it has been beneficially employed in the form of Dovers powder. I have not a great deal of experience, but in those cases where I have employed it, it has been with great benefit; It always gives relief in an Anasarcous swelling of the face & limbs, & Adematous swelling in Dysentery. I have found it beneficial.-

In Dysentery it has been very beneficial. D^r Clark gave an infusion of it. I think it preferable to Tart: Emet: because it dont induce such great debility. M^r Dick found it very beneficial in Dysentery of the E: Indies. He gave the infusion - it vomited the first day & not after. The practice of employing Ipecac in Dysentery is not a modern one. D^r Chisholm found a Combination of Calomel & Ipecac: a valuable medicine in those attended with Intermittent Fever. Ipecac is adapted to every state of Dysentery, to recent & Chronic. I have had great experience in both these stages I found it more efficacious in old cases than any other. If I could believe in Specifics, I sh^d call Ipecac: a Specific in Dysentery. My mode of employing it is different fm that of others, & is as follows

℞ Ipecac: —— gr^s 12
Opium —— gr^s 2
Creta —— gr^s 24 To be divided into 8 powders. 1 of wh^ch may be taken in 4 hours - Each dose containing gr^s i/2 of Ipecac:

& ½ of Opium. Since I have employed it I have
trusted more to it than any other One of the
most remarkable cases that evince the success
of this medicine is the Followg — Mr Page, a
patient of mine, last Summer, laboured under
Dysentery for 6 Mos during wch time he had
taken almost every other Remedy without
advantage, by the use of the above Recipe, he
was completely cured in a few days. —

In Dysentery Cruenta both Blood & Mu-
cus is discharged. † As Dysentery makes an ap-
proach to Hemorrhage, in those forms of the dis-
ease Ipecac is more particularly adapted to
it. & also to the Cure of Morbus Mucosus, (Mor-
bus mucosus partakes much of the Nature of Fe-
bris Alba) or those cases depending upon the
retained fæces. I can't well suppose it exerts
any Specific effect in the cure of this disease.
Cullen thinks its powers of Curing depends upon
the Purging, but this is not probable, for other pur-
gatives are not equally successful. Ipecac:
does much good in Dysentery when no Pur-

going taker place, & indeed I dont give it to produce Purging. Dr Moseley's opinion is that it cures by determening to the Skin. This however I dont believe is the case, for many Sudorifics are of no benefit in Dysentery. —

In Cynanche Tracheales. I have used the powder of Ipecac: in smart doses in the beginning of the disease. From the experiments of Mr Smith, it appears that the Narcotic effects of Opium are lessened by Ipecac: It is one of the best Emetics when opium has been taken in large doses either by accident or design. —

In Colica Hepatica. The french Physicians say it is useful combined with Opium Carminatives shews that Ipecac lessens the power of Opium. Case where 3ss of Laud was taken, Ipecac: cured it. On Pidgeons, it diminishes the power of Opium. The quantity that killed, when combined with Opium did no harm. 2 grs of Opium & 2 grs Ipecac: dont produce as much sleep as 1 gr of Opium uncombined. —

Spiræa Trifoliata.

This is an Indigenous vegetable, & is commonly known by the name of Indian Physic, also Bastard or wild Ginger. It is similar to Ipecac: The active property resides in the Bark, the Roots woody part & leaves possess also an Emetic quality. In country places the decoction is used. To reduce the Bark to powder & give it in substance 20 or 30 grs ats acts as powerfully on the system as 10 grs of Ipecac: In Maryland it is given to Horses as a Tonic. It flowers in July. —

Scilla Maritima or Squills

Is Diuretic, Diaphoretic, Emetic & Expectorant. It is a Native of the Sandy Seashore of Spain and Portugal. The bulb or root is employed. At present, it is little used as an Emetic, because we have many others more certain & safe, by drying it loses 4/5 of its weight according to Lewis & hence the dose ats is 6 grs of the Recent medicine, is as powerful as 3 of the dried. I have given it in infusion where Opium or Laud: has been taken. —

Ilex Vomitoria. a Species of Holly. It is confined in its native State to the Sea Shore — It is a native of the Carolina's & Georgia It is a decided Emetic & Diuretic, as soon as it touches the Stomach it is thrown up with vio= lence. It is a Sacred plant among the Indians (See Collections) ——

We may here mention Riding on Horseback Sailing, Tickling the Throat with a Feather & Per= haps this may be the secret of Dr Sydenham's Cure of Consumption, by means of Riding —

Siliquosa. Some of these deserve our attention as Emetics — The principal are Mustard & Horse-radish. A weak infusion of either is one of the best methods to restrain Vomiting, but a decoction, or Strong infusion is an Excellent Emetic.

Mineral

Mineral Emetics

Cuprum Vitriolatum (Sulphate of Copper)

Many of the preparations of Copper are Emetic, probably they may all be managed as to prove so. Sulph: Copper is made by adding sulphuric acid to Copper. Cullen employed it as an Emetic & Diuretic; & it is highly extolled by Dr Simmons in the early Stages of Phthisis Pulmonalis. He endeavours to distinguish the emetics most proper for this disease. He condemns Antimonials as their effects are not confined to the Stomach. He exhibited it in the following manner The Patient is to swallow half a pint of warm water before the dose &c is to be varied according to the age & circumstances of the Patient from 2 to 10 & even 20 gr. Commonly from 10 to 15 gr. dissolved in a Cup of warm water. after the dose another ½ pint warm water; & the moment it is thrown up, the patient is to take another dose. It was once thot a very dangerous Emetic, but I find it a very safe & manageable one. Mr Adair says it sometimes vomits gently & sometimes produces great pain. Her Formula was as follows

Sulphate of Copper ℥ß
Water ——————— ℥8 — The dose is
from 2 teaspoonfuls to 2 Tablespoonfuls according to
the age of the Patient. But it is not more service-
able than the white vitriol. Dr Marietta's dry
vomit is composed of equal parts of Tart: Emet: &
the Blue vitriol. the dose is 5 grs there is no drink
to be taken for it the name of dry vomit is deri-
ved. After the operation, a spoonful of brandy
may be given & afterwards a Cathartic. I did
not fail to mention some of the preparations of
Mercury that vomited. You all know that
Corros: Sublimate will have this effect but
the principal is the
Sulphate of Mercury or Turpith
Mineral in doses of 5 or 6 grs to an Adult. It
acts briskly It is not confined to the first passages
& when it does not prove emetic, if purges are
not given to carry it off by stool, it will pro-
duce Salivation. Cullen dont think favourably
of it as an Emetic, tho I find it manageable &

have frequently given it with advantage combined with Squill in Angina Maligna, in Dropsy, &c. Hernia Humoralis ariseing from the Venereal. It vomits very soon after it is taken, & throws off an immense quantity of water from the Stomach. The dose for an Adult is 4 or 6 grs. & for a child of 7 years old 2 grs.

White Vitriol or Sulphate of Zinc,

is the only preparation of Zinc that is employed as an Emetic. It is made by adding Sulphuric acid to Zinc. The dose is from 5 or 6 grs up to 30 Grs operates very speedily, & on this acct it is used when any thing deleterious has been taken into the Stomach, in such cases it may be exhibited in the quantity above mentioned. When too great a quantity of Opium has been taken Ipecac: is perhaps the best Emetic - An overdose of Vitr: Alb: may induce inflammatn of the Stomach, when pure it vomits without violence Boerhave supposes that this Emetic is peculiarly adapted to discharge those deleterious vegetables & destroy the irritability of the Stomach; but not so well

where Corrot: Sublim: Arsenic &c has been taken because by stimulating the Stomach so violently it may produce gangrene. The Vitriolic solution of Mosely leaves the Stomach less vitiated than other Emetics

Mosely's Formula. —

Alb: Viti: ——— ℥ij
Alum ——— ℥i
Cochineal ——— gr. 1 The whole to be

put in ℥j of boiling water, wh is then to be rubbed in a Marble Mortar after being left to cool it deposits a Sediment: & then it is to be poured off for use. A tablespoonful & sometimes 2 constitutes the dose The Cochineal is only added to give it a beautiful colour. If the Solution purges the Alum may be omitted. Dr Mosely employed it in Dysentery- he says if any ingredients are employed to make it agreeable, they always destroy its efficacy- Neither do the Components taken in the shape of a pill produce the same effect, he speaks highly of this Medicine in Consumption. I have used it in Consumptn & if ever I have done good it has been by this medicine. I have also used it in Hooping Cough & ulceration of the

lungs - Also in Asthma with seeming advantage.
a teaspoonful is the dose for a child. Dr Mosely
thinks it a kind of Specific in Consumpt.n - My
practice has been to give it in the morning on
an empty stomach, at noon, & in the evening. -

Antimoniated Tartrate of Potash. It was
known in 1631. Of all the preparations of Antimony,
this is the most universally employed. It is made by
boiling the glass of Antimony very finely ground
with an equal weight of the Cream of Tartar in water.
Filter the fluid, & evaporate it by a gentle heat
When it is allowed to rest. Crystals of Tart: Emet:
will be deposited. These are soluble in hot or cold
water, in 80 parts of the former to 40 of the latter.
It is decomposed by heat, metals, alkaline earths, &
by the matter of bitter & astringent vegetables. When
given to vomit the dose is 1 to 5 grs according to the
quality of the Medicine, or age of the Patient. The
best mode of exhibiting it is in divided doses, -
dissolve 4 grs in ℥ viii of water, & take a Tablespoon-
ful every 15 minutes, till it operates freely. It is

sometimes given in the Form of a pill with the Confection of Roses. It is very often combined with Ipecac: in 1ß of Tart: Emet: to 8 or 10 of Ipecac: The operation is promoted by drinking warm Chamomile tea &c Tart: Emet: dissolved in water & rubbed on the external parts, is said to produce Nausea, Perspiration &c If this be a fact the medicine must in these cases have been absorbed Tartar Emetic often operates as a Purgative —

Hermes Mineral —

This is a preparation of Antimony, it sometimes acts as an Emetic this given more frequently in doses of 1, 2 or 3 grs to promote Diaphoresis in large doses, it both vomits & purges. Hermes Mineral, or brown Antimoniated Sulphur is made by the Combination of prepared Antimony & mild Vegetable alkali according to the Dispensatory. It is used by the French & Germans. —

Antimoniatum Cathariticum

Dr Wilson Spurgeons is a valuable preparation of Antimony. Dr Black thinks it the same as the Sulphate of Antimony. —

James's Powder or Antimonium Calcareum, Phosphoratum. I think it probable the precise ingredients of this powder are not known Dr James's Son assured me repeatedly that the world was not acquainted with his Father's powder. It is certain however that it contains Phosphate of Lime & Antimony. I have found it Says Dr Barton to be more beneficial than any other Antimonial preparation whatever Dr James made oath that the following was a correct Statement of the composition. it is upon the records. Circumstances however induce us to believe it is still a secret. —

Calcine Antimony by a slow protracted heat, with animal Salt or Oil until deflagration takes place, then add Nitre, Phosphate of Lime & an acid An Antimonial Salt is then formed. Equal parts of Sulphuret of Antimony & ashes of bone will form it. Dr James first combined it of a mercurial preparation, but afterwards left it off He did not trust to his powder alone in curing fe-

vers, it was only to cleanse the Stomach, & then he gave the bark. Cullen first recommended Antimonials to cure Fevers, & his pupils spread the practice. Cullen says Antimonials must vomit to cure. Fordyce says when medicines vomit their effects are destroyed. Squill acts better as a diuretic when it produces Nausea, & so does Arsenic. Pulvis Antimonialis of the Edinburgh Dispensatory is thot to be the same as James's Powder. But it certainly is not so useful. James's powder has been known to salivate in several instances. It sometimes operates very powerfully in small doses both up & down. & at other times a large quantity will produce no effect. I have seen a Patient says Munro violently puked & Purged by 3 gr. while others were not affected in like manner by 30 gr. With regard to the dose, James says 30 gr is a moderate dose, Munroe says fm 5 to 10 gr. I have used Tart: Emet to recall a running (4 to 6 gr to 8 or 10 ℥ of water) when too soon stopped, to stimulate the urethra

as an injection in Gonorrhoea. James's Pow-
der has sustained its Character wherever it
has been employed. The operation of Antimo-
nials in checking fever is difficult to acct for,
it does not act by vomiting for then all Men
Emetics w^d be as effectual. —

We come next to speak of

Cathartics. —

This is an extensive & most important class
of medicines. The rudest nations employ Cathar-
tics, they were made known to us by the Sava-
ges, even the Beasts have recourse to them. The
Bear purges himself in the Spring. They promote
the evacuation of the Canal fm the upper orifice
of the Stomach downwards. They act by in-
creasing the Peristaltic motion of the Intestines.
Purging is in many instances excited inde-
pendant of Cathartic Medicines. Thus obstructed
perspiration often produces purging. Certain con-
tagious fevers, & cold water w^n applied to the ex-

extremities, all produce it. Dr Faulkner relates the case of a Lady cured of a fever & obstinate costiveness, by cold water to the extremities, & Berlan relates a case of obstinate costiveness continuing 3 days, that was cured by causing the patient to walk barefooted on a cold marble floor. In a case of Colica Pictonum in the Penn: Hospital, I found great advantage from cold applied to the extremities in producing purging — this is daily experienced by Gouty persons. —

Effects of Cathartics. — First to

evacuate the contents of the Alimentary Canal. Active purges not only evacuate the whole tract from the Stomach to the Anus, but also some of the fluids of the Liver, Pancreas, & other Contiguous Viscera. By depleting in their way they exert a very decided effect in diminishing the fulness & frequency of the Pulse, & also the heat of the body — hence their utility in fevers of too much action — in Febricula, low vegetable diet & purges are proper, & in Typhus they are necessary

There are exceptions with respect to their effects on the pulse - in Apoplexy it increases the frequency, & lessens the fulness. it has the same effect as Vt. Cathartics have a very great influence on the mind; in costiveness the mind is much dejected, but completely altered by the operation of a Purge. They also induce sleep. Maniacs who were awake for several days & nights have fallen asleep immediately after the operation of a Purge. Large & repeated doses of Ce given to Maniacs, they often restore reason. Generally an evacuation is necessary once in 24 hours. From this however there are very great deviations. Some people have a passage not more than once or twice a week, & yet enjoy good health. There has been instances of persons living in health for 3 Mo without any fecal discharge. It is probable that a deficiency of bile is sometimes the cause of Costiveness. There seems good reason to believe that the bile when in sufficient quantity stimulates the intes-

promotes their peristaltic motion downwards
Dr Monro is of opinion that the bile is an excre-
mentitious fluid, he infers it from the circumstance
of the Cuttle fish throwing out large quantities of an
inky fluid to prevent the pursuit of its enemies.
It is a point still involved in Controversy whether
the matter of Cathartics is ever carried into the
circulation. I think that some of the Purges are
absorbed, for the Colouring matter of Rhubarb is
often seen in the Urine. To this it is objected that
the colouring matter is different from the purgative
matter. I answer I have no proof of this. From
the operation of Cathartics we derive an Argument
in favour of absorption, because children are
often purged by sucking their mother during
the operation of a purge. Another Argument is
that if they are frequently applied to an issue, the
patient will be purged. The dose of Purges vary
remarkably in different persons, & in the same
person at different times. 2 persons are not af-
fected in the same manner by the same dose, Ce-
teris Paribus. Larger doses are also requisite in So-
uthern than in Northern Climates. The power of

Cathartics is wonderfully suspended by
great attention of mind, & perhaps in propor-
tion to the intensity of thought. Thus Newton
while Contemplating his work on Optics wd
have required an uncommon dose. & no doubt
Buonaparte wd require a very large & drastic
purge. The Historian of Cortez tells us, that
Conqueror having taken a sufficient dose of
some Cathartic, immediately mounted his horse
& engaged in battle, when the purge did not
operate till 12 hours after, when the battle
was over. Many other instances of the kind
might be adduced. There is a difference in
the Stimulus of different Cathartics Jalap & the
Sulphate of Soda are essentially different: the
last never produces inflammat^{n} The case is
very different with respect to Nitre Fever
Common Salt. A Narcotic power belongs to
some Cathartics - Purges also differ in their de-
grees of force. Some are gentle in their Operation
while others are more severe, hence the division

into Mild & Severe. the Mitiora & Acriora of Cullen.

Dr Duncans division is as follows

1st Cathartica Stimulantia, as Jalap Aloes, Scammony Colycinth &c

2d ____ Refrigerentia as Neutral Salts &c

3d ____ Astringentia as Rhubarb &c

4th ____ Emollientia, as Castor Oil Manna &c

5th ____ Narcotica as Tobacco. Euphorbium Gamboge &c I don't think this division deserves great merit, but there is some propriety in it. Some are more Stimulating & Refrigerent than others; but no Cathartic is entitled to the term Astringent. To Emollientia I offer no objection, altho' I could.

Cullen arranged them into Fortiora or the Stronger. & Lenitora or the weaker. — I cited Cathartics thro' the whole course of Lectures before Dr Hamilton published his book

I have arranged them as follows into

Vegetable Cathartics
Neutral Salts with an Alkaline Base
Mineral or Metallic Cathartics. —
Miscellaneous Cathartics. — & first of

Vegetable Cathartics

Dried Fruits Many of these are Cathartic. —
Manna is also a Cathartic. —
Sugar. This is well known as a Cathartic.
Honey. very different fm Sugar & more
laxative. —
Molasses This is different fm common Su-
gar

Oleum Ricini, or Castor Oil

Castor Oil is the produce of a plant called the
Oleus Communis Ricinus. It is a native of the
W. Indies, & some parts of the U States — on James
River it grows — It is obtained by extraction fm
the seed. The common dose for an Adult is a
large tablespoonful, but it may be given to 2
or 3 ℥ if necessary. It has operated when others
have failed. It is a very nauseous medicine to
some people — Taken in wine or brandy it sits bet-

ter on the Stomach. Children often take it readily when mixed with Syrup. The French Practitioners recommend it with Coffee. & it may also be taken with Milk or Cream. It is employed in all cases where Mer Cathartics are but is thought to bee adapted more to some cases such as Hemorrhoids especially in young people, as it is the least heating of all Cathartics. It gives but 2 or 3 Stools. Flor of Sulphur are the best remedies in Piles. —

In Colica Pictonum it is well suited, & has been strongly recommended by many Practitioners, but it has not answered my expectations. In Dysentery it has been much recommended The follow^g is the Formula I generally use. —

Castor Oil —	℥ij
G: Arab: ——	℥ij
Brown Sugar —	℥ij
Water —— —	℥vj well triturated to-

gether. This forms an excellent mild & gentle Cathartic, peculiarly adapted to children. I have employed it with great advantage, & after having obtained some natural Stools, I have trusted chiefly

to the Mixture with the addition of 60 or 100 drops of Laud: Dose 5 or 6 teaspoonfuls in 24 hours.—

Rhubarb is deservedly considered as one of the best Cathartics. There are different Species. The one called Rhea Palpatum grows in Tartary & China—this is the best For an Adult the dose is ℥ss. & it is often necessary to give ℥i. tho' sometimes ℥i will purge. It is adapted to all ages & Constitutions, when given in large doses it sometimes gripes, but most others are more apt. Besides its purgative it possesses a bitter quality that resides in the Yellow part, & is well adapted to give tone to the Stomach. Rhubarb is mild & innocent & may be given to a child, is less disposed to gripe or puke than Jalap. It possesses Astringent powers, as is proved by Chymical Analysis & by the taste. In Combination with Calomel—℔ss Rhubarb to 6 Calomel it is peculiarly good, & I am getting more & more attached to it every day. Rhubarb is evidently a Diuretic; & some say it has a peculiar Operation in

Opinion

affecting the Liver, Hence it has been given in Jaundice, but it is probable this doctrine arose from the doctrine of Signatures. The root is the part employed. It has been used as an Anthelmintic, & to destroy Fungus Flesh in Ulcers of a bad kind. Rhubarb is carried into the course of the Circulation as is proved by the urine perspiration &c. It corrects the odour of the Faces.

Butter Nut, White Walnut or Juglans

A Pill made of the extract is an excellent Cathartic. The dose is about 10 grs but it is sometimes necessary to give it up to ℈j & it sometimes operates in the dose of 3 to 5 grs The Extract is made by boiling the inner bark, it is of a deep brown colour & bitter taste, & never proves Emetic. It is beneficial in Dysentery either by acting as a Purge or Anodyne. It has been said that the extract is apt to produce disagreeable Affects of the Head. tho' I dont think this to be the case A Decoction of the Butternut has been efficacious in the disease called Yellow Water of Horses.

Mustard.—

The unbruised seed of Mustard is given in the dose of a Spoonful generally purges. This Cathartic is peculiarly adapted to a Torpid state of the Bowels; in Chronic Rheumatism, Palsy, Retrocedent Gout, & Febris Alba. It does not dispose to Costiveness. No uneasy sensation of the Stomach occurs.—

Asafoetida. This sometimes purges in 2, 3, or 4 grs

Gum Guiacum.— This has been used in the milder kinds of Paralysis. Dose a tablespoonful 2, or 3 times a day

Senna. It is brot fm Turky Persia & Syria. The leaves consist of a Gum, a Resin & an Essential Oil. They are nauseous to the taste. It is a certain & safe Cathartic & does not operate severely, but during the operation are apt to gripe, to correct wh Prunes, Figs, & Aromatic seeds are proper. Infuse it in infusion & add aromatic seeds to it— we have a native Senna. called

Cassia

Cassia Marilandica ℔ is not inferior, & is of the same genus. —

Polygala Seneka (See Cullen. This is employed in Dropsical affections, Vas it possesses more of a Diuretic than Cathartic property we shall treat of it under that head. —

Jalap. —

It is the Convolvulus Jalapa & derives its name from Alacca, a province in S. America The dried root has but little taste or smell, its taste is bitter & sub-acrid. It contains a Gum & resinous matter, its medical activity residing principally in the former. It grows near Savannah It is said to be an active Diuretic, & is a very useful & general Cathartic. Hoffman thot it unsafe for children, but Cullen says, if triturated with Sugar or Crystals of Tartar, it will not gripe, but I find it gripes Spunkes. It has one advantage over Rhubarb, it requires less; for an adult the dose is from 10 gr to ℈ss & for children at the breast 2, 3, or 4 gr may be given, but it is unsafe unless combined with Calomel, wh makes it set easier on

the Stomach. Jalap & Calomel are much recommended in Dropsy. The Tinct: of Jalap is made with proof Spirit. The dose frm 10 grs to ℈1 —

Podofillum Peletatum or May Apple

is common in every part of the U. States. It flowers early in May, & the fruit somewhat resembles an Apple. It creeps along the surface of the ground. The Cherokee Indians use it as a Purge, Emetic & Anthelmintic. The root is the part employed — it is a good & manageable Cathartic, & is milder, & equal, if not superior to Jalap. For an adult the dose is 20 gr. I have employed it 20 years & find it a most valuable Cathartic. Its operation is increased by Combination — 10 grs of the powdered root to 4 of Calomel, is the best purge we can employ in our autumnal, Remittent, & Intermittent fevers. Combined with Cryst: of Tartar, it is not so good, as they increase its tendency to puke & to gripe — It has several advantages over Jalap — for 1st It is Native — 2d It is not so apt to gripe or prove

Emetic. It produces an easy dolution of the Fe-
ver. The combination of May Apple with Rhu-
barb is highly beneficial. It is not so apt to
leave the body costive as Rhubarb. If the fresh
root be bruised & kept in water for 3 days, a froth
will collect on the surface wh is to be skimmed
off. The root then squeezed, & made into a Sy-
rup with molasses, forms an excellent extract
favours in Colica Pictonum. — The dose a tea-
spoonful every hour for a child. — I employed
the Podophillum in combination with Ca-
lomel successfully in the Y. Fever of 1793. —

Aloes —

There are several kinds. They all consist of Gum
& Resin, wh is of a black, or deep brown & Yellow
Colour. It is obtained from the inspissated juice
of a Mediterranean Vegetable. It is internally bit-
ter & somewhat acrid. Aloes is unquestionably
an important Cathartic. It is seldom used by
itself, but combined with Calomel & Jalap, &
it enters into the Composition of all the Cathartic

pills. I believe it is the principal ingredient of Anderson & Lee's pills — the best of wch I have ever employed is Lee's. It irritates the rectum remarkably & produces Hemorrhoidal affections. It is good in obstructions of the Menses. —

Black Hellebore. —

It grows in the mountainous parts of Germany. Its root, wch is the part employed, is a strong but not violent Cathartic; the dose from 10 gr. to ℈j. The Cathartic power resides in the resin, wch is violent, but becomes moderate on the addition of the Gum. It is efficacious in Melancholia. —

Gamboge. — There are 3

species of this plant, but we now treat of the Halactites Gamboge. Its Character — That wch breaks with a sharp fracture, & does not moisten in the hand is genuine — Tho' much neglected by the generality of practitioners, it is a very valuable medicine. I have been much in the habit of using it in obstinate costiveness wch sometimes accompanies intermittent fevers. & it has

succeeded in a dose of 3 or 6 grs. where 15 or 20 grs of Calomel, & 5 or 6 ozs of Castor Oil were ineffectual. Gamboge is by no means apt to excite a disposition to vomit - In 1764. Gamboge was found preferable to all other Cathartics wch were employed in a very Malignt fever wch prevailed in Virginia. Murray says it has been justly Celebrated as a remedy against tape worm. It is given in a dose from 5 to 20 grs by itself or combined with the Acidulous tartrite of Potash. The root is the part employed in practice, its taste is very acrid when green, but looses much of its acrimony by keeping. The dose is from 10 grs to ℈ß. Its active property resides principally in the Resin, It is very violent, so much so that it is rarely used. It was highly recommended by the Ancients in Mania & Melancholia

Scammony is the produce of a Species of Convolvulus, & is both Chymically & Mechanically allied to Jalap. The dose is from 3 to 12 grs triturated with Sugar or something to make it agreeable. —

Colycinthus. This is one of the most drastic purges we are acquainted with it grows in Turkey & Asia The pulp of the root is used. it possesses a nauseous bitter, & consists of gummy, earthy, & resinous parts. In small doses it irritates the intestines; in large, by its violent action, it excoriates the intestines & produces bloody stools. Its dose is from 4 to 10 grs It is seldom however used by itself, save when to promote the operation of other Cathartics combined with Jalap, Aloes, or mild muriate of Mercury — It is often given in obstinate Constipation in Mania & Coma — Its infusion says Murray has been recommended as an Anthelmintic. A wine prepared from the Colycinthus has been known to salivate & cure Syphilis — of this I know nothing From experience Enters into the composition of most of the Cathartic pills. ———

Siliquose Mustard given in a dose of a table-
spoonful of the unbruised seed proves a very useful
Cathartic, particularly in Paralytic & Rheumatic
affections

Sulphur.

This is entitled to some attention. The dose of the flowers of Sulphur is from 1 to 3ij for an adult. It is frequently combined with Crem. Tart. or Sulph of Soda. It is peculiarly adapted to Hemorrhoids & uterine Hemorrhages combined with Manna & Magnesia, because it dont heat the body, & leave the bowels disposed to costiveness; It is suited to children. It is much recommended by German Physicians in Dysentery. Sulphur is very sparingly soluble in the Animal fluids. Cullen thinks it acts principally on the last intestines Physicians have disputed very much whether crude sulphur was ever carried beyond the intestines. It is doubtful whether it ever enter into the course of the Circulation. An ointment of Sulphur externally, we know to be a certain remedy for the Itch, but whether it produces the same effects internally, is doubtful, but it will effect a cure. On the supposition that it is absorbed is founded the practice of giving sulphur to check a dangerous Salivation, but I have never found from books or experience, that it has

had this effect. A salivation is only to be stopt by producing a new action in the System wch will counteract it by making a greater impression. —

Calomel is so well known, that it is unnecessary to say any thing concerning it, only never to depend on it as y^e sole Cathartic in any disease. It is generally used in combination when given as a Cathartic

Neutral Salts. The Neutral Salts with an Alkaline basis, are refrigerating Cathartics, & are often the best we can employ, as they often stimulate the intestines when others fail, are cooling, & form an important class among the Cathartics

Sulphate of Soda This has been long recommended, is highly esteemed, & likely to retain its Reputation. The dose is ℥j for an adult, but is sometimes larger, & at times ℥ss will purge. On many occasions it is a powerful Stimuli, & does not inflame the intestines as Nitre does. It is very cooling & is highly useful in many cases

undergoes a decomposition in the Intestines. —

Phosphate of Soda

This has been said to have many advantages over the Sulphate — but experience has shewn the contrary & it is now laid aside. —

Sea Water.

This is an excellent Cathartic, it is composed of Magnesia Gypsum & common Salt, united with the Muriatic Acid. The purgative quality resides in the Muriate of Soda, wh exists in the largest proportion. When we wish to imitate it, we make a mixture of common Salt & Purgative Salts equal parts, the Dose of wh is a Table spoonful — Besides its purgative quality, it is excellent in Scrophula of wh Dr Barton mentions a case of a Lady — In this case it shd be bottled & drunk — Its effects are owing to the Muriate of Magnesia. —

Diuretics.—

The most striking feature of this class is to promote the secretion of urine. This can be done in 2 ways 1st By increasing the quantity in the blood

2d By introducing that may be a Stimulus to the Kidnies. — No medicine will act solely on the Kidnies —. The first we shall speak of is

Digitalis.—

Digitalis Purpurea is a native of every part of the old Continent, but not of America - it has however been introduced into our Gardens. It is a delicate plant in regard to the situation in which it grows; in a rich soil its virtues are not great; in a dry soil & exposed to the sun, it posses but little efficacy, but when in a sterile soil, & entirely shaded, its properties exist in the greatest vigour. The Purpurea is only an accidental term, as the white Digitalis possesses the same properties. It has been long known to the Botanist, & its properties appear to have been imperfectly known in the 17th Century, but it has not been long used in Medicine. McKay supposes it only fit for

strong constitutions. Haller would not use it because he thot it unmanageable. Boerhaave mentions it as a poisonous plant. Every part of the Digitalis may be used, the root, the leaves & the flowers — We shall confine ourselves chiefly to the leaves. — Efficacy has been ascribed to an Ointment of Digitalis & butter in Scrophulous ulcers. The flowers when taken internally prove violent Emetics. —

Sensible qualities. The leaves are bitter and nauseating, but not so much so as Tobacco, and from their taste no one would suppose it to be a medicine capable of so much good or harm.

Is Digitalis a Stimulant or Sedative? I believe it to be a powerful Stimulant. for its analogy to Tobacco, Stramonium & Opium, but its Stimulating property was not hinted at before I mentioned it. They have since been more thoroughly investigated. A man whose pulse was 64 at 20 minutes past 7 took a dose of Digitalis, in 5 minutes it was 66 — in 15, 68 — in 20, 70 — in 30, 72, in 40, 72 — in 45 it was reduced to 70 — in 55, 68 — in 85, 66 — in 110, 62 — in 115. 60 — & in 135 minutes, it was as low as 58 — it produced Nausea & three co-

pious evacuations But tho' I contend the prima-
ry effect of Digitalis is to stimulate, it may be so
managed as to have its sedative effects completely
at our command, an advantage we cannot de-
rive from Opium It has a very great power over the
Heart & Arteries - it has reduced the pulse 30 strokes
in a Minute. When given in large doses. It pro-
duces Nausea, sickness, vomiting, giddiness, ver-
tigo, confused vision, & an increased secretion of
Urine, precisely such effects as are produced by the
Henbane, Hemlock, Stramonium, Tobacco & Opi-
um. It does not produce sickness for some time
after it is taken, & the Stramonium & Tobacco excepted, it
brings on sickness different from any other medicine
viz - of a most deadly kind. The sickness does not
always accompany the increase of urine, it some-
times precedes, & sometimes follows it - But the pa-
tient is well rewarded by an increase of appe-
tite - But they are not at all necessary, they are
generally the effect of inexperience. I have known
the Pulse myself reduced 38 strokes in a minute.

Dr Withering says, when he first began to use the Digitalis he thot it necessary to produce this sickness but he found it only necessary to use it until it affects the Stomach, Pulse, urine, or bowels, & this is the signal to desist. — If given to day its Diuretic effects are not apparent until to morrow or next day. The Patient shd drink plentifully of Demulcent drinks. When great quantities of water are evacuated in a short time, bandages shd be applied as in Tapping. Digitalis often purges, & when this is the case, it is inefficacious. It generally impedes the flow of urine — Withering says it universally stops the diuretic effect. Some formerly combine opium with it. Withering says Digitalis seldom does good in Men of strong pulse, tense fibre, & florid countenance. But if the pulse is low, weak & intermitting, the skin cold & pale, we may expect the Diuretic effects to follow with success. It has often cured Dysuria Nither Paralytic affections, or Stones in the Bladder are any objection to its use. Dr W. says it is not a universal Diuretic, but it is more generally so

than any other; & if Digitalis fails, we have little to effect from others. But I have known Squill to succeed even after Digitalis has failed, & this has succeeded when they again have failed. In small doses & properly managed, it is a mild medicine, but large doses of it will do immediate harm by exhausting the patient. It is a matter of considerable importance to know what medicines are best to counteract these deleterious effects. Withering reposes most confidence in the application of Clisters, & Dr Beddoes in large doses of Opium; but in several cases in which came under my care, large sinapisms, applied to the ankles, calves of the legs & wrists have succeeded best. Dr Darwin has well observed that Digit: is peculiarly proper in those Dropsies arising from habitual intemperance in drinking. I have also found this to be the case. A Butcher who came under my care, & was much addicted to intemperance was immediately cured of Hydrothorax by 6 or 7 grs of the Digitalis, & never afterwards had a return of the

disease, altho' he persevered in his old habits. It is peculiarly adapted to decrease that artificial increase of pulse brot on by intemperance. —

Digitalis is exhibited in 2 forms, by Tinct: & Powder — the tinct: can be more easily taken, but by giving it in powder, or pill, we have the advantage of ascertaining the precise dose. There is some property also in the Digitalis w^h is not taken up by the Spirit.

℞ Tincture — Fol: Dig. — ℥ij
Sp^t Rectif: — ℥iv
Aq: ——— ℥x — Dose ƒss

30 to 60 drops once a day — this sh^d be given for a day or two & then discontinued & in a day or 2 more, if the patient does not get sick, it sh^d again be resorted to — See Withering —

5 ℈ of the leaves in ℥8 of water form the infusion. Digitalis is the most valuable medicine in cases of Dropsy except those of a Cystic kind It is less efficacious in Ascites than in Hydrothorax — But its beneficial effects are very great in those Dropsies w^h succeed an Intermittent or

continued Fever. Fenniere gave it to 24 patients with Dropsy - 9 of whom were cured 2 relieved 4 died, & 9 received no benefit. When digit: is successful. it shews its effects early. if it did not answer the first week, he changed it, because he observed its Narcotic effect after a long use, precluded its Diuretic. Its diuretic effect is not so great when Nausea is produced - in this respect it is on a footing with other Diuretics. I have employed it in many cases, in some it effects every thing, in others nothing. In a few cases of Ascites it has done good - Altho' much employed in Philadelphia, it has sustained its caracter irreproachable. Digitalis we must acknowledge is sometimes dangerous even in the hands of Practitioners of experience. It has done harm, & even killed, yet many effects are ascribed to it wh it never has produced. Dr Currie is unfriendly to the use of Digitalis in Dropsy, he says it shd be ranked among the Poisons. —

Dr Darwins Formula is as follows

Pulv: Leaves ——— ℥ij
Rect: Sp^t Wine ——— ℥iv
Water ——— ℥iv — Dose fr^m 30 to
60 drops twice in the Morning

Dropsies Originate fr^m very different causes. They are frequently the effects of fever, & often attended with a Phlogistic diathesis of the System. Hair overthrows the opinions of those who assert Digitalis to be inferiour in Dropsies on acc^t of its sedative effects. —

Hemorrhages. Digitalis has been here recommended, & Dr Currie who thot it deleterious in Dropsy, used it in Hemorrhage with success. — He also used it with advantage in Mania. Dr Fenwick advises its exhibition in Hemoptysis, he used the infusion. The secret operation of digitalis I expect lies in its wonderful influence over the Heart & Arteries. I have not much experience of its use in Hemorrhages. In those cases of Hemoptysis where a reduction of the Pulse is necessary, our medicine may no doubt be useful. & is more peculiarly adapted. It is not however comparable to Lead & sh^d be given only when B.S. is indicated. — Nauseating Emetics have been of more service in

in Hemorrhages than is generally imagined.—

Phthisis Pulmonalis. Digitalis has certainly been used with success in this formidable disease, & altho' it has not effected a cure, it has abated the violent symptoms, wch is saying a great deal. I have given it a fair trial & have not found it successful, in my hands it has cured but one solitary case. I depend more upon the Nitriolic Solution of Ipecac: In 1803 I gave it to a number of patients with little success. Tho' if it dont cure Consumptn, it has cured those alarming & violent Catarrhs wch borders on incipient Consumptn It requires great care in its exhibition in Consumption. The Physician shd see his patient once a day. —

In Pneumonia I have been in the practice of giving Foxglove for many years, after the pulse was reduced by the Lancet, & the pain abated — I give it in Combination with Nitre as follows

Tinct: Digitalis — 70 to 100 drops
Nitric ——— ℥i
Water — — — ℥ss
Sugar ——— ℈ ß. The dose is 2 tea = spoonfuls every 2 hours, so as to produce slight nausea. —

In Inflammatory Rheumatism after V.S. & Blistering, I have found Digit: very important, used so as to keep up Nausea. —

In Nephritis our Medicine has been strongly recommended by Dr Withering, but I am not certain that it has been beneficial in Inflammatory Nephritis in my hands, but

In Dysuria its exhibition is very beneficial. I have seen evident good effects from it. —

In Mania I have seen evident good effects from the use of Digitalis. I think insanity is more frequently accompanied with severe Pyrexia than is imagined, & in those cases, it appears to me that it wd be a valuable Medicine. I gave it in one case of Dropsical Mania, & it completely cured my Patient. It has cured insanity unconnected with

Dropsy. I confine my use of Digitalis more particularly to the young & Plethoric. In Mania blended with Fever where it produces Nausea it is often beneficial. In one case of Puerperale Mania, I performed a complete cure

In Hydrops Intertinum it has been used I am not certain that it is very effectual, tho' there is good encouragement. —

In Hydrocephalus Internus it has been said to be useful. I have never used it. But I have prevented the Complaint by giving Digitalis to a young Lady who had every symptom of an Incipient Hydrocephalus. —

Angina Pectoris. I have cured one decided case. Mr Right who laboured under it for a considerable time, his pulse was intermitting on whom the Lancet & Blisters were ineffectual, was at length cured by Digitalis. —

Abortion. Dr Carson says Digitalis is peculiarly adapted to prevent Abortion when given in small doses so as to keep up a slight nausea. —

Odema often succeeds Genuine Scarlatina, for the removing of this Digitalis is recommended by Dr Thornton. —

Epilepsy. — In Epilepsy Digit: has been recommended, when accompanied with a remarkable increase of the pulse. Dr Beddoes says Opium is the best remedy where very great does have been taken — Opium is important but the effects of Sypnapisms to the wrists & Ankles are uniformly efficacious — I have frequently given also an infusion of Horse Radish. —

Tobacco. —

When treating before of this plant we mentioned that it belonged to the natural order of Solani & was nearly allied to Stramonium & Digitalis — & the general physiology of Foxglove & Tobacco are so much alike that any person wd think them nearly allied, tho' it in fact the case, altho' they don't stand in the same artificial order of the Botanist. Altho' this plant was known 200 years ago, its diuretic properties

were not known till lately. It is chiefly an infusion that is used. Dr Fowler directs us to macerate ℥i of the dried leaves in ℔j of boiling water. After standing some days, strain it & add ℥ij Spt. Wine - Begin by giving 14 drops & gradually increase to the effect of 80 or 100 drops twice in 24 hours. Sometimes it nauseates & vomits, but its most powerful effect is a diuretic Fowler says the medium dose is 80 drops for an adult twice in 24 hours. It shd never be given on an empty Stomach, as it is apt to produce distressing sickness - the proper time is just before dinner & bed time - The dose is greatly varied by the age & constitution of the Patient

In Dysuria it is an important medicine. Berger tells us that a decoction of the leaves applied in the form of Fomentation completely cured a Chronic case. Foxglove & Tobacco produce nearly the same effects - we ought to keep in view their great affinity -

Squill. —

We have already treated of the Emetic properties of this medicine under that head, & it is certainly one of the most important of the Diuretics. Tis the pulp of the Bulb, & root, wch we employ. There are several forms of exhibiting it. The fresh pulp is made into pills & given as an Expectorant or Diuretic, in the dose of 3 to 10 grs. It is more commonly used in the dried state. 1 grs well dried is equal to 20 of the recent pulp; the reason is that a great mass of the matter of the Pulp is a mere ment water, wch is dissipated by drying. Squills are however truly acrid, poisonous & powerfully stimulant wch is evident from its effects on the human body, as well as on animals. It kills Cats, Dogs, Horses, Fish &c A man who had taken an Overdose, was affected with nausea, vomiting, giddiness & inflammation of the Stomach. Sometimes it produces vomiting of blood &c. Duarin mentions the case of a number of persons who were killed by use of the powder. There is a very striking affinity between Squill & Foxglove. They are both

poisonous. Cathartic. Emetic, & Diuretic & indeed
I think they both inflame the Stomach. Their ef-
fects upon the Heart & Arteries is the same, first rai-
sing the pulse & secondary depressing it: but the
Squill is the more powerful Stimulus & more acrid
I have seen the pulse reduced by it to 39 in a Drop-
sical patient. This is nearly as low as we have
ever seen it reduced by the Foxglove in the same
length of time. It is difficult to acquire a knowledge
of one of these plants without the other. Nothing
save Dr Withering but the Lancet, can so com-
pletely lower the tone of the system as the Squill
In Dropsy it has long been a favourite me-
dicine. Dr Home gave the dried Squill daily in
the dose of 2 to 4 grs to excite Nausea & to be con-
tinued for some time. he cured 10 cases by this
practice. If the water was evacuated very ra-
pidly, he applied bandages round the abdomen
as after tapping, & at night gave an opiate, &
afterwards Tonics, as Bark Steel &c. It has been
combined with some Neutral Salt. either to cor-

correct its acrimony or to determine to the kidneys.
The Squill combined with Nitre was given long
before Mr Home thot of it. Fothergill used it with
Nitre - Cullen combined it with Neutral Salts.
It is successfully used in Ascites, & when it produ-
ces Nausea, it then acts best on the Kidnies.
Combined with Calomel, it sometimes succeeds
better than when given alone. In combination
with Turpith Mineral my practice is to give
1, 2, or 3 boluses in 24 hours, so that each dose
may contain of Turpith Min: - 1, 2, to 6 grs
Squill ——— 1 2 or 3 grs
Thus is the best preparation of the kind that can
be employed. Quarrier found it an excellent
remedy in Hydrops Pectoris & also in Ascites
And I have used the Squill with the happiest ef-
fects in Ascites Hydrothorax, & Anasarca - but it
has also failed in all - Yet in many cases it ex-
ceeded my expectations, & if not a cure, at least re-
lief was obtained. - Judge —— useful life was
preserved for years, by giving the Squill one day &
Calomel the next. When the belly is lax, nitre or
any other Neutral Salt must not be added. ——

Different preparations are employed – The Acetate of Squills is made by impregnating 1 part of dried Squill to 6 of vinegar – It is used in Coughs, Colds & Asthmatic affections The dose is Ʒß to Ʒi – in Ʒij it nauseates & Ʒß it pukes We sh^d be careful how we pass from one parcel to another, for as we have already observed, there is the greatest difference between the dried & recent Squill 1 gr. of the former being equal to Ʒj of the latter. I have seen Squill exert an evident effect in a dose of 1 or 2 grs. If well prepared the dose is 1 gr. of the dried Squill to an Adult. Late experiments in Italy say that Dropsies have been cured by its external use – 1 gr. of the Squill dissolved in Gastric juice & rubbed in – Ʒj dissolved in Saliva is said to have produced the same effect. When the powder is joined with Crude Mercury it has been found a more powerful Diuretic.

Colchicum

This is nearly allied to Squill, but is a more uncertain Diuretic. Its bulb is used as in the Squill. It grows in the wet meadows in Switzerland. An Oxymel is formed by adding ℥i of the Pulp of the root to ℥j of white wine & ℥ii of honey. This is inferior to the Oxymel of Squills. Bergius recommended it.

Lactuca or Lettuce

is more or less Anodyne. It is certain a very powerful Opium has been extracted frm lettuce. Colin used an extract made frm the plant just before it flowered. The Lactuca Ferosa is recommended in Dropsy. It is Diuretic & Lataxive. Colin began with 2 grs & gradually increased the dose till the patient took 4 ℈ he allowed the Patient to drink plentifully. Duarin says he never found any benefit frm it. Pope was acquainted with the Anodyne Qualities of the Lettuce. ——

Artichoke.—

The fresh juice fm the leaves ℥ss to ℥j mixed with white wine, is an excellent diuretic. Dr Wilson says in some cases of Dropsy proceeding fm Hepatic affections, he found the inspissated juice a valuable Medicine — It promoted perspiration & urine, & in a short time the swelling of the legs went down. Dr Munro gave it in Hydrops, in decoction — He took of the leaves 3ij Handfuls, Juniper berries & Mustard seed of each 2 tablespoonfuls. boil fm 2 gallons to one strain & take ℥j thrice a day — He cured several with it of Dropsies of considerable standing Darwin recommends it as a Diuretic

Helleborus Niger. —

The root is to be macerated in Rect: Spt Vini & then expressed. — It forms the Basis of Bakers tonic pills so much celebrated in Dropsy — Ferriere used these pills in Dropsy Quarrin says he has seen good effects fm Bakers pills but more good fm an infusion with some bit-

ter vegetable. It sh^d be given in a relaxed state of the System.

Gamboge is entitled to attention as a Diuretic. It may be given in doses of 3 or 10 grs. Its vertues are enhanced by being combined with Cryst^ls of Tartar. & in combination with Calomel it is excellent in Anasarca. Dr Sydenham gave 15 grs of it at a dose in Dropsies. It is also used in combination with the vegetable fixed Alkalies.

Siliquose Plants. — Some of these deserve our attention as Diuretics

Horse Radish is the principal one. When taken into the Stomach it is a most powerful Incitant. It increases the quantity of Urine Perspiration. I have marked its effects in myself, & have found it to answer my most sanguine expectations. It is employed in Dropsies, particularly those unattended with Fever, & with a general flaccidity of the System, or when the inflammatory diathesis have been removed

moved. Horse radish exerts evident effects on the urinary vessels. It conveys a peculiar heat to the urine. I doubt that it was ever recommended in Gleets except by myself. It has answered my most sanguine expectations, & has cured Gleets which Cubebs Terri &c have failed

Mustard. The seed is considerably Diuretic & is employed with success in those Dropsies arising fm Rheumatism & Palsy

Alliacea increase every secretion of the body. They all contain a peculiar acrimony wch is much disposed to pass off by urine. They possess a considerable stimulating power, & increase the secretion by the Skin lungs & kidnies. Sydenham employed them much in Dropsy. Cullen says that in several cases the Aliacea added much to the cure of Dropsy

Garlic is a powerful Diuretic & employed in Dropsies — Munro found

Leeks valuable in Dropsy

℞ Diaphoretic

Polygala Seneka. —

This has a farinaceous acid & pungent taste in the fauces. When chewed it produces a tickling cough & a copious flow of saliva. It is cathartic Diuretic & Emetic. I have found it of service in Dropsies. It frequently produces a salivation. I have used it in Hydrothorax & always found it to salivate. Mr Tennant first spoke of its efficacy in 1742 which was the first medical paper published in N. America. He used the powder in the dose of 35 grs & also the decoction in ℥ℑ of bruised root to ℔ss boiling water. To prevent its Emetic effect he gave it in Cinnamon water. Seneka has been observed to produce a genuine salivation Mrs A in Hydrothorax took it in large quantities & it produced a copious salivation which continued for 6 weeks, & so profuse was the Ptyalism, that it debilitated her so much that I was obliged to check it. She had a very peculiar fetor, different from that caused by Mercury & resembling putrifying meat. Its effects on the pulse are very great, so much so as to prohibit

its exhibition in the first stage of inflammatory
diseases. Mr Fenant never gave it in in=
flammatory Pleurisy. but those occurring in
Marshy Countries & in Pneumonia Notha
he first had recourse to V.S. & he repeated pretty
largely & frequently. Many writers have re=
commended it in Vera Pleuritis. It is not
adapted to inflammatory pneumony, as it is a
powerful & durable Stimulus. De Haen tells
us it was injurious in this disease. I have ne=
ver used it in Pneumonia properly so called
but Dr. Stevens has used it in this complaint
I have given it only in Pneumonia Trachea=
lis. There are many Cases of Pneumonia in
w^h the Treacherous pulse is no guide. Hence if
caution be not used, more blood may be drawn
than is proper. —

Cynanche Trachealis. Dr Archer first
made us acquainted with its use in this disease.
Its introduction in 1796 is highly important
I have employed the Seneka in the form of a da

turated decoction of the root - When it produces expectoration of mucus, & proves Emetic, it is best. I frequently give Calomel combined with it. There are many cases of Croup where Ipc must not be used, but I have not omitted Aspinapinnus. The dose is not nice - the root may be used cut in small pieces or ℥j bruised ℥ij of water put by the fire - Stir it & in ½ an hour it will be fit for use - one Tablespoonful for a child of 5 years of age every hour, till puking & expectoration is produced - guard against purging, for purging from this article does not suit the disease. Acts by expectoration - Remember the case of the ulcerous sore throat where the patient could not swallow until he had chewed Seneka. It sometimes translates the disease. Dr Tennant gave it in Rheumatism, Dropsy, Gout &c. In Chronic Rheumatism it is useful - Its being indiscriminately given in all dropsies is the reason why it has so often failed - 6 cases out of 13 have been cured - One case of Complete dropsy was cured by Seneka & Calomel in a few days - In the

Chronic Headache of women Dr Munro gave Di in pills with good effect. –

The Animal Kingdom furnishes us with only one Diuretic & that is

Canthorides. They are employed as a Diuretic both in Substance & tincture. It is used internally in the Form of Tinct:

Formula of Tinct:

Macerate Canthorides	–	Zij
Cochineal		Zi
Sp^t Wine		Oiss Dose Jss

to 7 to 10 & 15 drops. I have found many cases in wh the Tinct: Canth: shewed evident diuretic effects. Cullen is disposed to think unfavourably of them, but we know it to be a Diuretic. Werlhoff has given many instances of its Diuretic effects & 1 of Pulv: Canthar: is the dose. On the Contrary Dr Smith & others say they are of little use. – These contradictory facts may be accounted for by supposing that they exhibited it in different Stages of the disease We bleed in Y: Fever with success in the begin

ning of the disease yet Dr performed in the 2d
& 3 Days wd be followed by death. Dr Jack-
son employed it with advantage in Dropsy. —
Chalmers used it with evident advantage Can-
thar: 6 grs Camphor Zß made into 6 pills one
of wh was taken every 2 hours. It has been re-
commended in Hydrophobia, on the principal of
its exciting inflammat.n in the Kidnies, and
thus producing a Counter Stimulant However
plausible this Theory may be, I think it will
not answer when put in practice Canthardes
has been used internally in Diabetes & is said
to be valuable Morton deemed it almost a
Specific in this disease. Dr Chalmers of S.
Carolina found it efficacious in this disease
4 grs given at bed time. He also cured a case
of Ascites by giving 4 grs of the Pulv: Canth:
an hour before bed time. Richter thinks it
valuable in Fluor Albus & Gleets his For-
mula was as follows —

Canthariden —— Zij

℞ Guiac —— ℥ij
——— ℥iij
Ag.t Vine —— ℥ij - Dose 20 to 30 drops
twice or thrice a day. The follow.g Recipe I have
found of infinite advantage in Gleets
℞ Tinct of Rhei —— ℥ij
G. Guiac —— ℥ij
Tinct: Cantharr —— ℥ij
Ag.t Vin —— ℥xxiv - Dose for an
Adult a tablespoonful thrice a day. — Meade
spoke highly of its use in Cutaneous diseases. —
Home gave 20 drops of the Tinct: thrice a day
in Typhus Fever, & found it of great utility — I
have employed Cantharides in Hooping Cough
in the dose of 1℔ — It is a good medicine in Light
Paralytic affections, & in Hemiplegia
Woodlice are of a faintish peculiar
disagreeable & sweetish taste — They have been re-
commended as a Diuretic — They are however
of no importance. —

Vitriolic Æther, is a valuable Diuretic. I can say but little of my own experience, but it is highly recommended by Dr in the dose of 2 teaspoonfuls twice a day. It is an invaluable Medicine in Gout in the Stomach. It is successfully employed in Convulsive affections. Dr Fothergill very highly recommends Vit: Æther in Hydrops Pectoris, & declares he has never employed any medicine in this Complaint with as much success.

Neutral Salts.

Under the head of Diuretics belong some of the Neutral Salts. Cullen says, that with respect to the whole of the Neutral Salts, that all substances pass out of the body, & more or less by the Kidnies, & in this way they prove more of less Diuretic, but I suppose their effects depend upon their operation on the solids, & with respect to their diuretic effects, I beg leave to differ Dr Cullen. I believe all neutral salts with an alkaline basis, are entitled to the name of Diuretic but those whose basis are Alcum for their basis are

very doubtful. In these last I have never observed any diuretic effects. —

Sal Diureticus. —

This is one of the principal diuretics among the neutral salts. It has been much recommended I have had but little experience of it. Cullen thinks it valuable. Fothergill & Lewis likewise speaks favourably of it — They direct ℥ij to be saturated with vinegar for a dose — it will sometimes produce intestinal evacuations & perspiration, without a Diuretic tendency. —

Nitrate of Potash. —

Its primary effect is to stimulate. Large doses combined with the Crystals of Tartar have cured many mild dropsies. There are constitutions with wh it does not agree. Munroe used it in a number of cases in wh it weakened the patients so much that he had to desist from its use. —
Mr Archer by taking ℥i daily had his arm Paralytic. It also affects the Stomach. — It is a powerful Stimulant in large doses, it induces Stran-

gury. Bloody urine, inflammat^n of almost all the contents of the abdomen, & Death. It is used in the Philadelphia Dispensary as an expectorant, & found to be a very useful & powerful one. —

Cream of Tartar. —

D^r Berry says that this medicine cured 6 out of 10 dropsical Patients, & further observes that when beneficial, its good effects are immediately apparent. D^r Horne, on the contrary, observes that its efficacy is often not seen for 2 or 3 weeks. He gave it to 20 patients 14 of whom were cured. He directs ℥j to be dissolved in ℥x of water for a Patient in 24 hours. It sometimes vomits, sometimes produces watery Stools, & generally increases the appetite, when it operates successfully there is an increase of Urine in 24 hours. Ferguson says it sometimes purges 4 or 5 times in 24 hours, & when this is the case, it is often necessary to give some Tonic. Fisher speaks in high praise of it. he observes it sh^d not be given

in Dropsies of great weakness. It is peculiarly adapted to Dropsies ~~of great weakness~~ that occcur in women about the time that the Catamenia ceases, & in those also accompanied with Hepatic affections. I have often employed it, & cured a Dropsical case succeeding to Suppis, & in [illegible] cases I have succeeded when more powerful medicines have failed. —

Anthelmintics.

These are such medicines as are useful in expelling worms. Whether they destroy the worms in the body or dislodge them is uncertain. There are many different kinds of worms, as the round worm, the white worm, the short tape worm, the broad tape worm &c —

The Intestinal is totally distinct from the earth worm, as the former is smaller at the 2 ends & destitute of wrinkles. They are nearly of the same length of the earth worm, but they have not the large belly as is seen in these last. They vary

fm 2 to 15 inches in length. The body slender & of a white green Colour, & they are bipaperous. — When incommoded & dislodged by Anthelmintics they leave their young behind. They are chiefly confined to the small intestines, where most Chyle is to be had — Tho' not unfrequently they travel to the Stomach — Hair is evident fm the Society with wm they are discharged by an Emetic, fm thence to the Fauces & Oesophagus producing a disease wm no Physician can distinguish fm Cynanche Trachealis. Vast numbers are sometimes found in the Intestines. Ounce discharged 1000 fm a child in 10 or 12 days — The 2d Species is the Ascarides Vermiculares about 1/2 inch in length, of a pale red colour, smooth surface and small — They are chiefly confined to Children & are mostly found in the Rectum.

Tenia Lata or Tape Worm has the power of reproducing itself when the smallest portion is left in the intestines. & it possesses this power even out of the body when the temperature is nearly the same

same. It has neither heart nor blood vessels, but consists of a Stomach & long intestine. The Cucubitia are a link of the same chain.

Guinea Worm. It is of a pale yellow colour & is a native of the E & W. Indies. It is frequently found in the morning dew, it enters the feet occasions much distress, great itching & inflammation. It infests the muscles of the arms & legs. In extracting this worm, great care sh^d be taken that no part whatever remains, as it will grow with redoubled vigour. 6 Feet of this worm was extracted from a Negro in the Hospital, & it was effected by tying a small piece of lead round the head wh^n appeared thro' a pustule w^h it had caused to suppurate, & the gradual but continued weight of the lead caused its total extraction.

The Trichiatus Hominus is chiefly confined to the Cocum, it resembles the Arcarides, As hair is as fine as can possibly be.—

How are worms introduced into the Body? This has been much disputed whether they are

born with us, or taken in by the lungs or with food. Spallanzani has discovered a vermicular in the blood, precisely similar to the vermiculares of the semen. It is certain that some worms of the human body are actually taken in with the food or some other way. The Ascarides exist out of the body, in boggy places roots & old trees &c. The Ascarides lumbricalis are never seen out of the body, & it is probable that the Alimentary Canal is their natural habitation. The Tenia is the worst of all the different species, is sometimes born with us, & they have a slow growth, excepting when they are ruptured, & then their increase is rapid. Some nations are particularly subject to them. Dr Drei gave Calomel to a child of 3 years old with a view of Purging. & Brot fm it Tenia 22 feet in length. Now it is evident that so much could not be generated in so short a time. —

The Lumbrico Ener & Tenia are as common in the Duodenum as any part of the body. &

they are also found in the Hepatic ducts

Symptoms indicating the existence of worms, are frequent piercing pains in the Abdomen, pale & livid complexion, sometimes rosy & florid, frequent starting in sleep, fœtid breath, & an inclination to vomit, the mouth generally full of Phlegm, giddiness picking the nose, slimy discharges, sometimes Epilepsy & Fever, known by the name of worm fever. None of these symptoms however exclusively belong to this Complaint, as they are seen in Hydrocephalus Internus, Dysentery & Diarrhœa. Dr Home says an Œdematous swelling of the upper lip & Alopecia are the most infallible signs The distressing itching about the Anus produced by the Ascarides generally occurs at the close of the day, in the middle of the day the sensation is not felt. This is not an infallible sign, for it often occurs in Gout & is therefore called Pleuritis Arthritica. Worms give rise to numerous diseases, as Epilepsy, Chorea St Viti, this

* But the root is far preferable it is thrice as strong as the top

aider more frequently than the former Pur worms Hydrocephalic fever, Hydroceph: Intern: & Mania. They actually produce Hydrops Intestinum but what is effectual in destroying the worms will cure the dropsy. They do not however necessarily produce disease. for great quantities often exist in the intestines without interrupting the ordinary Course of Health or producing any inconvenience.

Many Animals besides man are subject to worms. —

Spigelia Marilandica or Carolina Pink Root. — Linnaeus at one time thot it a Species of Honey suckle. It grows in S. Carolina & Tennessee, & is a perennial plant. The root is the part chiefly employed, altho' the leaves are sometimes used + It is one of the most powerful, safest & best Anthelmintics we are acquainted with, in proper doses it is not nauseous, it produces laxity of the bowels in large doses it proves Emetic, & often produces Vertigo Coma & convulsive twitching of the eye It is Commonly thot that 12 grs is a dose for a child

of 3 years old. A third of that quantety for a child of a year old & for an Adult from 1 to 1½ in substance - I am of opinion that there is something very deleterious in the P: Root. Dr Linning put 20 grs in a pint of boiling water, adding ½ Sugar, the first to keep the bow. dr open, & the Sugar to render it palatable. Some generally gave 10 grs twice a day. It is the most important medecine of the kind. & where Anthelmintics are indicated, I never omit its use With respect to large doses producing this Convulsion of the globe of the eye, it is uncertain whether it is prejudicial or not. for Dr Tucker says, he always indeavoured to produce this affection, & then only the whole efficacy of the Medicine was exerted. - Some of our Apothecaries say that these effects are produced by a vine that twines round the stalk of the Spigelia, & that if we are careful to pick it off, no such effects are produced. - Dr Chalmers says it has the best effects when it produces Vertigo. Over doses how

ever have certainly produced ill consequences, it once proved fatal in Philadelphia. — It is the only Anthelmintic employed here. —

Melia Azedarach or Pride of India

This is a valuable Anthelmintic, the most powerful & certain I have employed. The bark of the root is used, either in Substance or Saturated decoction. In the case of an Adult who took the decoction in large quantities, with the effect of discharging a great number of worms, it seemed to occasion some confusion of the Head with a trembling of the hands. It appears peculiarly adapted to the Lumbricalis, or common round worm. It has also dislodged a great number of the Tape worm. Is the Melia a narcotic or poisonous vegetable? It is probable this is the case - Horses and Horned Cattle however eat the leaves & berries with impunity. The Robin & Mocking bird devour large quantities of these berries. Their repast however is often at the expence of their lives, for falling down they are easily taken. Does not this indicate a Narcotic quality?

Helleborus Fotidus, or Bears Foot —
The leaves are Anthelmintic & may be given in
doses of ℥j morning & night to a child of 5 or 6
years. Bisset recommends a syrup made of it
A decoction of 1 or ℥ij proves Cathartic. —

Cabbage Tree Bark of the West Indies, is
given in cases of worms, in decoction, syrup, ex-
tract, & powder — The decoction is preferable & is
made by boiling slowly ℥ss of the fresh dried bark
in a quart of water. till it assumes the Colour of
Madeira Wine. This sweetened is syrup, eva-
porated, it forms an extract. The Geoffrea or Cab-
bage tree purges & pukes. It is in my opinion a
very efficacious remedy. Dr. Rush says it never
fails. —

Camphor ℥ss to ℥ij of Olive oil
thrown up by injection every hour might have
been found successful, it comes away in the mor-
ning sometimes natural & sometimes with faces.
It is excellent in that disagreeable itching of the
Anus produced by the Ascarides, used by way of
an Ointment. The fumes of Camph: are improper.

rages

Polypodium Vulgare of Linnæus

Polypody. The root of the Male Fern is a Capillary plant, growing on old walls, the trunks of decayed trees. That found upon the Oak is generally preferred, tho' not sensibly different from others. It has been employed in Medicine for many years nevertheless its virtues remain to be determined Madam Brain a Swiss lady used it with success in Tenia, & acquired so great a reputation by her secret worm powder, that the government purchased the secret of her. It is certainly a powerful Anthelmintic & destroys the Tenia very soon. The taste is mild & gently astringent, it seldom purges. The day after its exhibition the patient sh^d take a Cathartic. The dose for an Adult is ℈i to ℥ij. The best Polypody is to be met with in many parts of Pennsylvania & New Jersey. —

Valerian has been frequently employed as an Anthelmintic, & has certainly contributed to evacuate the worms from those who have

& as the earth worm or Lumbrici exer

taken it in a considerable degree. Valerian has long been used in Epilepsy & occasionally effects a cure; when it does so, I believe it is by killing or destroying the worms which are sometimes the cause of Epilepsy. I cured Mr Liepei's son with it — he discharged an enormous quantity of worms. —

Lime Water injected into the Rectum is a good Anthelmintic

Gamboge has also been employed with success in worms. —

Aloes 3ij dissolved in a gill of milk are excellent as a Clyster in Ascarides. —

Carbonic Acid saturated with water & taken into the Stomach, or by injection has been used with success

Vinegar quickly kills worms out of the body; & perhaps it may have the same effect if taken internally. —

Mercury. Calomel is well known as a Vermifuge. It is well adapted to worms

in children. It may be given in large doses, as children are with more difficulty salivated than adults. —

Corrosive Sublimate. Gardenier of Edinburgh recommends ℥ss. of pure water saturated with Sal: Ammon: to be mixed with ℥ss of Cor: Sub: & made into 250 pills. This is said to possess Anthelmintic properties. —

Arsenic has been highly recommended by some. The white oxyd is used. I know nothing of it from experience, but for its poisonous quality we can hardly doubt but it may be used with advantage. — Dr Fisher recommends Fowler's Solution 2 or 3 times a day in as large doses as the Stomach will bear. —

Iron — Different preparations are employed as Anthelmintics. The Sulphate is used. Rubigo Ferri is peculiarly indicated where Torpor of the Intestines exist — It must be given in large doses to prove Anthelmintic

Salt. Salt & water has been given

in great quantities with the effect of bringing away vast quantities of worms. To a child of 5 years I gave ℥ij of salt water, it puked and purged her violently, but discharged upwards of 100 round worms ℥ij of salt in 2 gallons of water, & giving ℥ij of this solution daily has discharged worms after the failure of some of the most celebrated Anthelmintics. I have sometimes put 2 lbs of salt in 2 Q^ts of water & given one half & the remainder in 2 hours to a person of 12 years. In a lad to whom I gave it in this way, it puked & purged him violently but discharged vast quantities of worms. — Injections of salt & water also destroys worms. —

Bitters of various kinds have been supposed to act specifically on worms, but we cannot accede to this opinion. They do good chiefly by their Tonic power. —

Some Anthelmintics operate Mechanically

The Dolichos Pruriens or Cowhage acts principally in this way. As it does no good when

given in Tinct: Infusion or Decoction. — The hairy down covering the pod is scraped off & made into an electuary with Syrup. The dose for a child is a teaspoonful every morning early. & for an adult a Tablespoonful. Its operation is Mechanical, for the bristles or Spicula of the down irritates & destroys them. It shd not be given in an inflamed state of the bowels or when their natural Mucus is abraded. —

Tin. Tin operates Mechanically, for the Arsenic contained in it is too small to produce any effect. It shd be ~~taken~~ to obtain its good effects.

Pewter Tin is a powerful Anthelmintic. Made into an Amalgam, it acts as an Antidote to the round worm

Formula. — Melted Tin — 5 parts
Quick silver — 2 parts
Test powder — 1 part. Rub them till all the Globules disappear, divide into 12 dozes, 2 of which to be given a day. —

Sugar

Sugar in the 17th Century was thot rather to Cleate than to destroy worms, but this notion is now deserted — From the Experiments of Carminati, it appears to be one of the most virulent poisons to Dogs, Cizzards & Pidgeons, It purges them, but dogs & Sparrows are not affected by it; it kills Sheep It is a most deleterious poison to worms out of the body. It is an excellent anthelmintic. & we know that a saccharine diet is highly proper for children with worms It does not appear to be so hostile to the Tenia as to the other kind of worms. —

Tobacco is considerably Anthelmintic when it fails internally, external fomentations Poultices often succeed. —

Blisters have been strongly recommended as Anthelmintics. —

Exercise may with strict propriety be classed among the Anthelmintics. Moderate & healthy exercise is peculiarly adapted to the Asparides. —

Tonics have been too much neglected in cases of worms. They are particularly indicated in lax & debilitated habits - Boys out of health are subject to worms; the fair sex having the chief honour of affording pasture for these most detestable of Animals

Bark is often very beneficial in worms. The diet of a child diseased with worms shd be warm, nourishing & well seasoned with spices - the drink, beer or Porter & butter &c is strictly forbidden is probably very proper, it is certainly ~~very~~ not injurious. The poorer kinds of cheese are to be avoided, while the warmer & more pungent shd be taken. —

Emmenagogues. —

By the term Emmenagogues or Menagogues, we mean that class of Medicines which act so as to promote the menstrual discharge of blood. — Sometimes they act by a general impression on the system. Specific emmenag^s we have none We shall keep in view the Retention & Obstruction of the menses — by the former we mean their non-appearance at the usual time of life — by the latter, their ceasing altogether, or coming on at great & irregular intervals, after appearing in their Natural periods for a number of years. — All the Retention of the menses is founded on an atonic debilitated state of the system, yet we often find it take place in Girls of a Robust & Plethoric Constitution — Passions of the mind, venereal desires & propensities exert a great influence in promoting this discharge. As this is a delicate subject, we shall waive it for the present. —

Tonics have been found peculiarly beneficial in Retention of the Menses Some of the

fotid Gums & Gum resins as Asafotida has been found useful in Retention. It is a useful Emmenagogue; & proper in those Hysterical affections wh take place about the time of puberty in the Female. In obstructions of the Menses that are not obstinate it has succeeded — Dose from 5 to 20 grs

Some Aliaceous plants are nearly allied, & shd be used as a part of the diet. Lust a young Physician wd cause the face of a girl of 16 to be suffused with blushes who wd recommend Garlic for the Retention of her menses.

Juniper Sabina has long been celebrated as an emmenagogue. Some authors speak of a Jss a dose. It is greatly employed in promoting Abortion Zj may be given 3 times in 24 hours. It cured obstinate obstructions of the Menses 3 girls out of 5. It has a strong resinous bitter taste, & yields an essential oil. In some parts of Europe it is so much used in promoting Abortion, that its sale except

under legal restrictions is forbidden. —

Castor is frequently used in Combination with Asafotida in the dose of 10 gr. to ℥j It is better adapted to retained menses when the pulse is low & the System relaxed. —

Soot has been said to be very good in Retention of the Menses ℈j to ℈ij in ℥j hours It has been combined with Asafotida. —

Rosemary The tea of Rosemary is beneficial. Bergius highly extols it in Chlorosis

Adelia Ricenella is a Native of the W Indies, & is an efficacious emmenagogue. It is used by the Negroes to promote abortion. I have used it with great success in Retention of Menses. —

Pionum Officinale. It has an acrid sweet bitter, & salty astringent taste. It once acquired great reputation, but is now deservedly neglected. —

Aristolochia Longo. This was once much esteemed, but is now much less.

thought of, but for its affinity to Serpentaria. it is no doubt good. & deserves attention. —

Fever Few. This is thot to be a good emen agogue in Uterine obstructions. The Dose is 10 gtt to ℈i of the expressed juice. —

Tinct: of Helleborus Niger is a powerful Article. The Tinct: says Dr Barton never failed. I gave it in Mania depending on a Uterine affection, & effected a cure. Begin with a Teaspoonful 2 or 3 times in 24 hours & gradually increase the dose to twice or thrice that quantity. This shd be given (as all the Emmenagogues ought) about the time the menses ought to make their appearance.. Dr Mead says it is a Specific. Dr Heberden says he does not find it very useful. —

Camomile Flowers have been found useful & even when the more active have failed. Dr Heberden says he knows women in whom these flowers constantly induced a return of the Menses. —

Rubia Tinctorum or *Madder* has been long celebrated as a Deobstruent, Diuretic & Emenagogue. It is a perennial plant & possesses very slight astringency. D^r Home gave it to 19 Patients, 14 of whom were cured, the dose was from ℥ss to a ℥ 2 or 3 times in 24 hours. He observes that it restored the Uterine discharge before the 12^th^ day. From its colouring the Foetus in Utero, it appears to have deservedly acquired merit. I have used it with advantage chiefly in cases of obstructed Menses

Digitalis has been used as an Emenagogue in some cases with success - generally in combination with some other Medicine. -

Emetics deserve to be classed among the Emmenagogues, chiefly such as operate quickly as Ipecac: Ant: Vitr: &c I have found them successful in Retention of the Menses, in Plethoric habits attended with pains in the Head & back.

Mercury says D^r Cullen is valuable in suppressed Menses. In this City we have found a slight Salivation, better adapted to retained Men-

× Emmenagogue

ses than most other Medicines. —

Opium after Pediluvium, is peculiarly adapted to those cases accompanied with Hysteria. Some writers say it takes off the Spasmodic Constriction of the Uterine Vessels. —

Crocus or Saffron I have never used altho' there are vouchers in favour of its Emetic Qualities. It removes the Venereal warts of the Glans Penis. —

Electricity & Compression of the Crural Artery have been used. The effects of Electricity is very violent, it increases the Pulse & perspiration. It induces fever & real blisters ecchymosis & extravasation of blood in the brain. this shews that it is dangerous in Paralytic affections accompanied with plethora. Electricity is useful in obstinate Opthalmia, exerting great effects on the Moving Fibres. — It has been recommended in some cases of Fluor albus, & in Chronic Rheumatism. —

Compression of the Crural Artery has in some instances been advantageous. —

Exercise. Total retention of the Menses often depend on inactivity & improper diet in such cases exercise is proper. —

Lithontriptics or Antilithics.

By this term of Antilithics I mean those medicines which give relief in the disease Lithiasis or Calculus, & also in Nephritis when this depends upon the same causes that induce Calculus, such as a gouty diathesis. If I prefer this term to the old one of Lithontriptics it was formerly employed — The greater part of the bitters are Antilithics such as the Quassia's Gentians Centaury &c. Haller, Linnaeus & others uses them. Sandovers testimony is very strong in their favour, & particularly on an infusion of Quassia. The purest bitters are generally the best Antilithics — Many of the purest Astringents are also of this Class, as some species of Geranium & the table tea. It is remarkable that the dis-

ease of Calculus is unknown in Japan & China where much tea is drunk. We find our Calculous patients are generally Coffee & not tea drinkers. Vit must be owing to the Astringency wh exists in tea. Those articles are the best in wh there is a combination of Astringency & bitterness as the Uva Ursi —

Uva Ursi. This plant bears a berry. It is a Native of Europe Asia & America — It grows in N York & N. England. It is an Astringent, when the leaves are chewed, it communicates to the tongue an Astringent & bitter taste. Vincreases the flow of Saliva. Vis said the Stalks & leaves are the most bitter, & that the Bark possesses none. The leaves consist more of gummy than resinous parts — hence water extract its virtues better than Spt — & hence a decoction is better than an infusion. On the pulse it exerts very inconsiderable effects. It was known to the Antients in 1756 Dr Hann made it known as a remedy for Calculus. Physicians in all countries have given

us acct of their Success. Donald Munro tells us he found it inefficacious. Dr Ferriere says he gave it with manifest advantage in Nephritic cases, preceding its use by Ev. & Purging He gave 5 grs of Acid Acet to 1/2 gr of Opium, & informs us that by their means he cured 12 out of 16 patients. His praises & encomiums are unreserved; he says that 1. even when joined with Opium produced Nausea, & on this acct he gave 5 grs 3 or 4 times a day. I have employed it in large doses & uncombined with Opium without ever perceiving this Nausea our Author describes. Sauvage gave it in doses of 15 grs & he gives it in large doses. Such medicine is not only adapted to Calculus & Nephritis, but is exhibited with advantage in the different affections of the Urinary Organs where there is no Calculus. De Haen used it in Ulcerous affections of the Bladder & Urinary parts, & it has been employed in Dysuria & Bloody Urine, & strangury with success

In bloody urine Vin Rhat disease in 30l in the
coats of the bladder secrete a preternatural quan-
tity of mucus (called Catarrhus Vesicæ). Uva
ursi has been beneficially exhibited. Sauvage
says it produces a preternatural quantity of
mucus. Where the Prostrate Gland is diseased,
it can be of no service, but where the bladder
alone is affected, it certainly dispels that vis-
cid matter wh is found in the urine. An in-
fusion or decoction has been advantageously
employed in Fluor Albus & the Catarrhus
Vesicæ by injection. —

Uva ursi certainly relieves Calculus, but how
does it act? It does increase the fulness & fre-
quency of the Pulse a little, but it produces no
preternatural discharge of urine. It produces
a constriction of the Chest in Nephritica Po
dagrica. & A purges. The lithic acid is compo-
sed of Animal Gelatin or calcareous earth. On
distillation it yields an acid liquor. It dissolves
Calculus in some measure — but this is not its

operation as it is adapted to Podagra Ne-
phritica where there is no Calculus It also af-
fords relief altho the Stone still remains in
the bladder It alters the state of the urine, ren-
dering it less fotid. In some cases it acts by
expelling the Stone. In one case it had evident
effect in discharging granules of Stone. Where
the urine is of thick consistence, fotid smell, and
turning blue vegetable green much pain is thus
excited, & here Uva ursi is very beneficial by
correcting the State of the urine. In one case the
Uva ursi relieved the pains from the Stone, al-
tho a sound rendered it certain that one did
exist. It has been known to render a Stone per-
fectly soft. Gout & Nephritis are, as I have
repeatedly observed, intimately connected. It
relieves Nephritis, as Bitters relieve Gout, & is
most serviceable when Nephritis is Connected
with Gout. We will say then it relieves Cal-
culus by a certain peculiar combination of
bitter & Astringent properties. ——

Tea. The Common table Tea has been employed as an Antilithic

The Aliacea particularly Garlick & Leek has been found serviceable in Calculus. The beard of the Leek is the part most esteemed. Handful of beards in a pint of water. —

Typula Umbilata is sometimes used as an Antilithic

Carbonate of Soda &

Muriatic Acid have been useful in Nephretic Cases. —

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